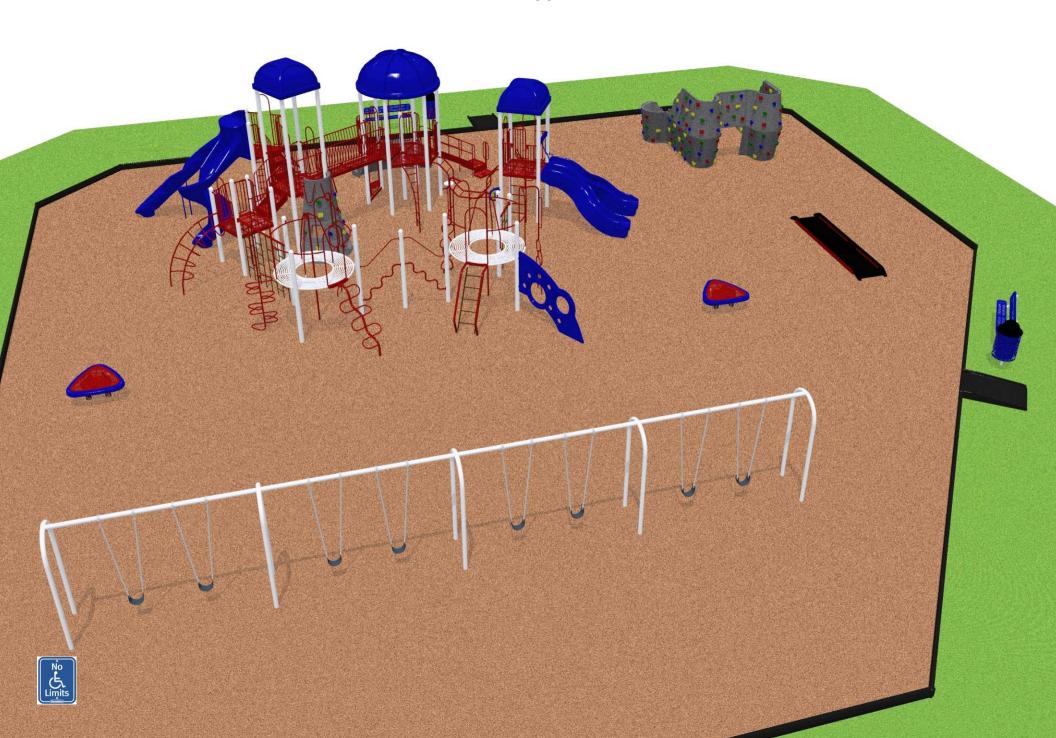
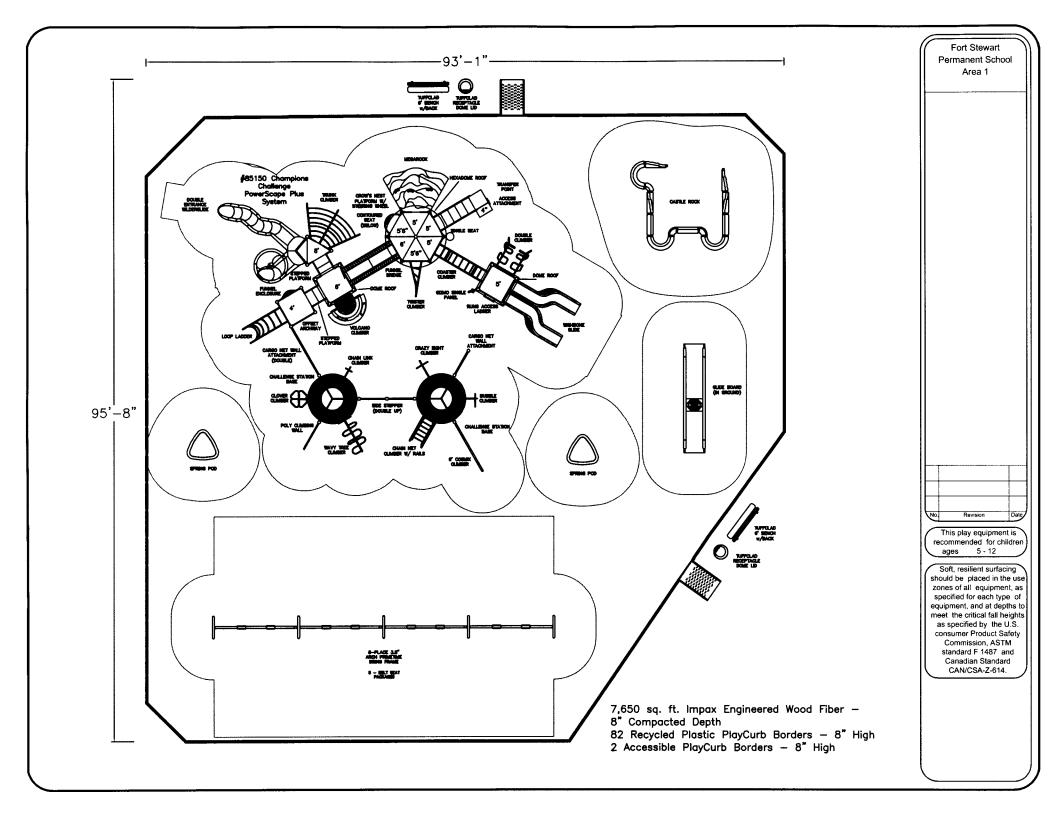
Appendix I

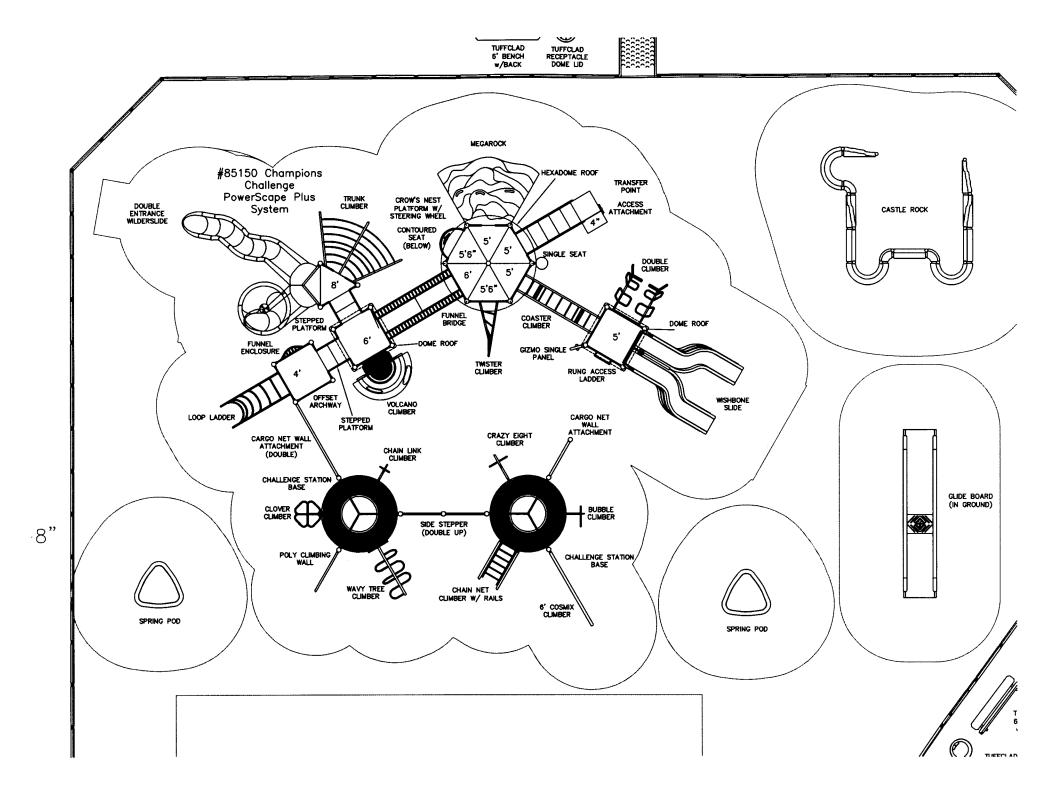
Playground Equipment: Layout and Specifications







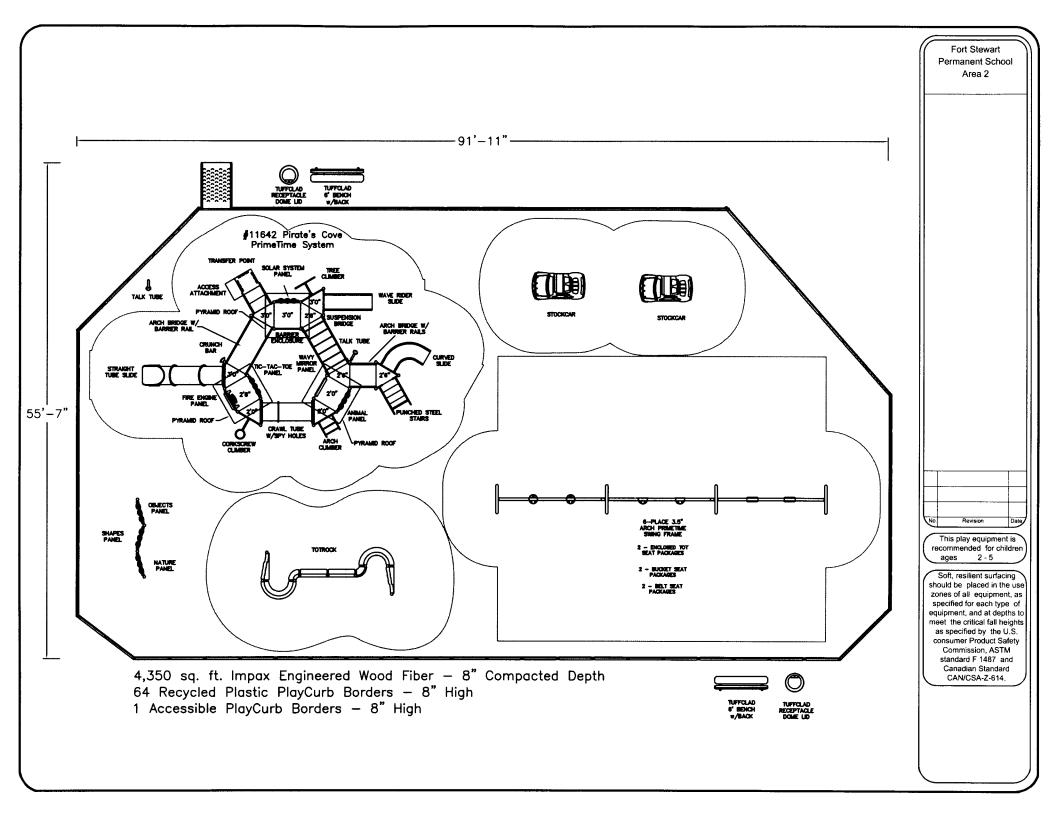


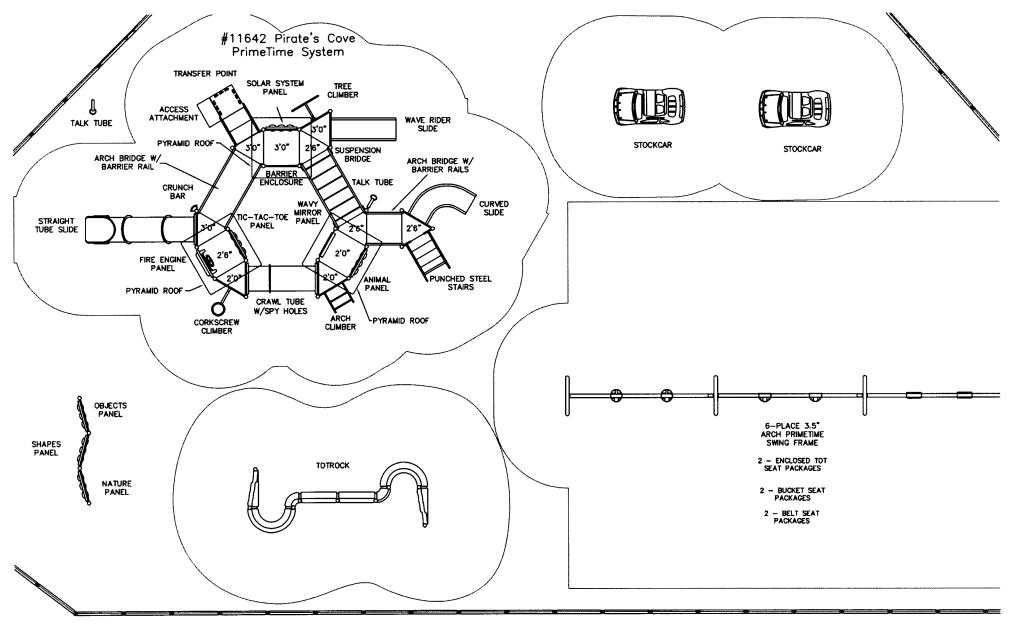




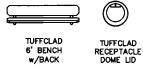








4,350 sq. ft. Impax Engineered Wood Fiber — 8" Compacted Depth 64 Recycled Plastic PlayCurb Borders — 8" High 1 Accessible PlayCurb Borders — 8" High



Equipment List

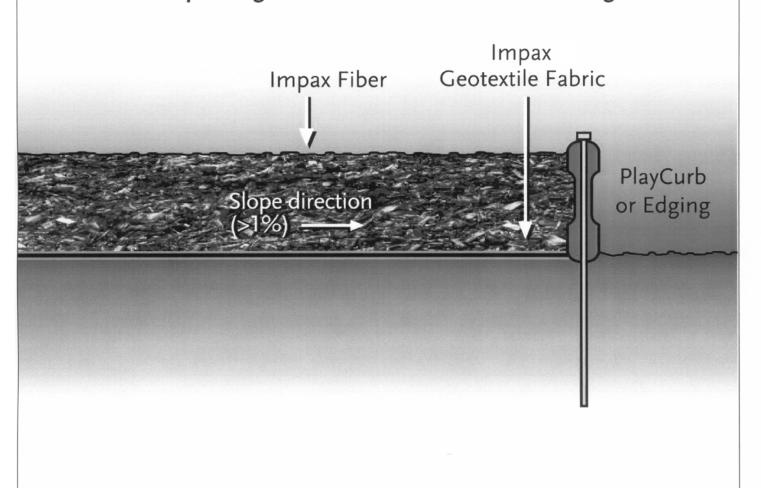
Fort Stewart Elementary School Fort Stewart, GA 31315

Ship to Zip: 31315

| <u>QTY</u> | <u>ITEM</u> | DESCRIPTION |
|------------|-------------|--|
| 1 | | - Area 1 - |
| 1 | 85150 | Champions Challenge |
| 2 | 6067 | Spring Pod |
| 1 | 6120 | Glide Board, F/S |
| 1 | 8930 | Castle Rock |
| 1 | 12583 | Primetime Swing Frame, 3 1/2" Od |
| 1 | 12584 | Primetime Swing Add-A-Bay, 3 1/2" Od |
| 8 | 8910 | Belt Seat 3 1/2"Od(8910) |
| 1 | Impx | Impax Engineered Wood Fiber |
| 4 | 161290 | - 7,650 sq. ft 8" Compacted Depth Geo-Textile 2250 Sq Ft Roll |
| 12 | 161292 | Wear Mat 44"X48" |
| 82 | 4850 | 8" Playcurb Pkg-Black |
| 2 | 4854 | Accessible Playcurb-Black |
| 2 | 28009 | 6' P/S Bench W/Back Inground |
| 2 | 28024 | Receptable W/Dome Top Inground |
| 1 | | |
| 1 | | - Area 2 - |
| 1 | 11642 | Pirate's Cove |
| 2 | 8658 | Stockcar |
| 1 | 8932 | Tot Rock |
| 1 | 12583 | Primetime Swing Frame, 3 1/2" Od |
| 2 | 12584 | Primetime Swing Add-A-Bay, 3 1/2" Od |
| 2 | 8696 | Encl Seat 3 1/2"(8696) |
| 2 | 8698 | Bucket Seat 3 1/2"(8698) |
| 2 | 8910 | Belt Seat 3 1/2"Od(8910) |
| 1 | Impx | Impax Engineered Wood Fiber |
| _ | | - 4,350 sq. ft 8" Compacted Depth |
| 3 | 161290 | Geo-Textile 2250 Sq Ft Roll |
| 9 | 161292 | Wear Mat 44"X48" |
| 64 | 4850 | 8" Playcurb Pkg-Black |
| 1 | 4854 | Accessible Playcurb-Black |
| 2 | 28009 | 6' P/S Bench W/Back Inground |
| 2 | 28024 | Receptable W/Dome Top Inground |

Engineered Wood Fiber Details

Impax Engineered Wood Fiber - Basic Drainage



Bid Specification Engineered Wood Fiber

Engineered Wood Fiber Surfacing

Description Of Product

Product is manufactured crushed wood fiber comprised of softwoods and/or hardwoods, consisting of randomly sized wood fibers the majority of which do not exceed 1.5" In length and containing 10% to 20% fines to aid in compaction. (It is generally understood that the manufacturing process allows a few oversized pieces.)

Product must prove to be non-toxic. It may not contain any recycled wood products or any wood containing paint, chemicals or additives. Bidder to provide toxicity data.

Product to have minimal bark and to be free of twigs, leaf debris and other organic material, and to be certified as non-flammable. (Test data available upon request.)

Product depth, after installation, must be in accordance with the procedure described in ASTM F1292 and meet guidelines for critical height as set forth by the Consumer Product Safety Commission for use of wood products for protective surfacing.

ASTM Testing Certification

Manufacturer must be in compliance and provide testing data for the following standards as set forth by the American standard for testing materials (ASTM) for surface systems under and around playground equipment.

ASTM F1951-99 (previously ASTM PS 83-97) determination of accessibility of surface systems under and around playground equipment*

ASTM F1292-96 impact attenuation of surface systems under and around playground equipment*

ASTM F2075-01 sieve analysis of fine and coarse aggregates*

IPEMA Certified

Manufacturer must provide proof of certification. "In the interest of public playground safety, ipema provides an independent laboratory which validates a manufacturer's certification of conformance to ASTM F1292-99. A list of current validated products, their thickness and critical heights may be viewed at www.ipema.com."

Geotextile Weed Barrier Fabric

Installation of geotextile fabric must accompany that of the crushed wood surfacing on all new installations. Geotextile fabric must be a minimum of 28 mils thick and have a tested 26 gallons per square foot per minute permeability.

Manufacturer Agreement

Manufacturer must carry 10 million dollars in product liability insurance. Manufacturer must have a written 10-year limited product warranty.

Equipment List

Fort Stewart Elementary School Fort Stewart, GA 31315

Ship to Zip: 31315

| <u>QTY</u> | <u>ITEM</u> | DESCRIPTION |
|------------|-------------|--|
| 1 | | - Area 1 - |
| 1 | 85150 | Champions Challenge |
| 2 | 6067 | Spring Pod |
| 1 | 6120 | Glide Board, F/S |
| 1 | 8930 | Castle Rock |
| 1 | 12583 | Primetime Swing Frame, 3 1/2" Od |
| 1 | 12584 | Primetime Swing Add-A-Bay, 3 1/2" Od |
| 8 | 8910 | Belt Seat 3 1/2"Od(8910) |
| 1 | Impx | Impax Engineered Wood Fiber |
| 4 | 161290 | - 7,650 sq. ft 8" Compacted Depth Geo-Textile 2250 Sq Ft Roll |
| 12 | 161292 | Wear Mat 44"X48" |
| 82 | 4850 | 8" Playcurb Pkg-Black |
| 2 | 4854 | Accessible Playcurb-Black |
| 2 | 28009 | 6' P/S Bench W/Back Inground |
| 2 | 28024 | Receptable W/Dome Top Inground |
| 1 | | |
| 1 | | - Area 2 - |
| 1 | 11642 | Pirate's Cove |
| 2 | 8658 | Stockcar |
| 1 | 8932 | Tot Rock |
| 1 | 12583 | Primetime Swing Frame, 3 1/2" Od |
| 2 | 12584 | Primetime Swing Add-A-Bay, 3 1/2" Od |
| 2 | 8696 | Encl Seat 3 1/2"(8696) |
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| 1 | Impx | Impax Engineered Wood Fiber |
| _ | | - 4,350 sq. ft 8" Compacted Depth |
| 3 | 161290 | Geo-Textile 2250 Sq Ft Roll |
| 9 | 161292 | Wear Mat 44"X48" |
| 64 | 4850 | 8" Playcurb Pkg-Black |
| 1 | 4854 | Accessible Playcurb-Black |
| 2 | 28009 | 6' P/S Bench W/Back Inground |
| 2 | 28024 | Receptable W/Dome Top Inground |

Bid Specification Impax Wear Mat

Quality Assurance

Manufactured to high standards, Impax Wear Mats utilize the best quality materials. Each tile is molded to a +/- 1mm tolerance.

Color

The color of the Impax Wear Mats shall be black with gray specks.

Water Permeability

Percolation rated no less than 1.4 liters/sec/square meter.

Coefficient of Friction

ASTM D 1894 of greater than .73 dry.

Physical Characteristics

44 inches x 48 inches (14.667 square feet) x 1" thick. Average weight 57 lbs.

Materials

Impax Wear Mats shall be manufactured of a combination of EPDM rubber (15%) recycled SBR rubber (85%), and a single component polyurethane binding agent.

Bid Specification TerraFlow® Geocomposite Subsurfacing Collector-drain

The prefabricated TerraFlow geocomposite subsurface drainage system shall consist of a flexible thermoformed three-dimensional polymer core. The polymer core shall be tightly encapsulated by a non-woven geotextile. The core shall consist of a sufficient number of support members for a composite interaction between the polymer core and the geotextile overwrap to prevent geotextile intrusion and in-plane flow reduction.

The prefabricated TerraFlow geocomposite drainage system shall provide a minimum flow rate of 18 gallons per minute per foot width when tested in accordance with ASTM D4716 under the following boundary conditions:

200 psf load

0.10 gradient

Soil environment

The product test sample shall be representative of the product to be supplied for installation.

The prefabricated TerraFlow subsurface drainage system shall permit inflow from both sides. The minimum area for unobstructed inflow shall be 85% on the primary side of the drain and 12% on the secondary collection side of the drain.

The Compressive strength of the prefabricated TerraFlow subsurface drainage system shall be determined by ASTM D1621

and shall be minimum of 2600 psf at the maximum deflection of 10%. Core material must be virgin high-density polyethylene conforming to ASTM D1248, Type III with suitable colorants and additives to provide protection against ultraviolet-light degradation during storage and installation. The drain core must have cuspations projecting from the flat, perforated base in a uniformly spaced pattern.

The geotextile used to overlap the polymer core should be non-woven, needle-punched and meet the following minimum roll values:

Grab Tensile Strength (ASTM D4632) 95lbs.

Grab Tensile Elongation (ASTM D4632) 50% Minimum

Puncture (ASTM D4833) 45lbs.

Trapezoidal Tear Strength (ASTM D4533) 40lbs.

Mullen Burst (ASTM D3786) 180lbs.

Coefficient of permeability (ASTM D4491) 0.20 cm/sec.

AOS (ASTM D4751) 70

Bid Specification Impax Geotextile Fabric

Impax geotextile fabric is used with Impax Engineered Wood Fiber to separate the wood fiber from the drainage system. It provides a water permeable barrier to hold the rubber in place and prevent the drainage system from being clogged.

Physical Properties

Thickness 28 mils, minimum

Water permeability (minimum) 26 gallons/sq. ft./minute

Playground Surface Architectural Specification Engineered Wood Fiber

Part 1 General

1.1 Description

Impax engineered wood fiber, properly installed with geotextile barrier over appropriate drainage, provides a playground surface which meets U.S. Consumer Product Safety Commission Guidelines and ASTM Standards for play surface resilience and accessibility. wear mats help eliminate engineered wood fiber displacement in high traffic areas (e.g. under swings, at bottom of slides).

1.2 Quality Assurance

Impact Attenuation

When installed to a compacted depth of eight inches. Impax engineered wood fiber will, when tested according to ASTM F1292-99, have a critical height (i.e. G-max less than 200, HIC less than 1000) of 8 ft. minimum. Twelve inches of Impax engineered wood fiber, when tested according to ASTM F1292-99, will have a critical height of 12-ft. minimum.

Accessibility

When properly installed and compacted, Impax engineered wood fiber must pass ASTM F1951, Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Safety.

Fines Control

When tested according to ASTM C186-76A, a maximum of 20 percent of Impax engineered wood fiber may pass a No. 16 sieve.

Flammability

Impax engineered wood fiber must pass the ASTM D2859 flammability test.

Geotextile Fabric Thickness

Geotextile fabric must have a minimum thickness of 28 mils.

Geotextile Fabric Water Permeability

Water permeability of geotextile fabric must be a minimum of 26 gallons/sq. ft./minute.

Wear Mat Spec

Wear mats are 44" x 48" x 1" thick and limit the displacement of the Impax engineered wood fiber.

1.3 Submittals

Submittal packages shall include but not be limited to (1) product samples, (2) supplier's written warranty, and (3) independent laboratory results for tests required in Section 1.2.

1.4 Warranty

Impax engineered wood fiber is warranted for ten (10) years for ASTM F1292 shock attenuation and against defects at time of delivery.

Geotextile fabric is warranted against deterioration and decay at the time of delivery.

Part 2 Products

2.1 Impax Engineered Wood Fiber

Impax engineered wood fiber is a wood product manufactured from virgin hardwood or softwood. It is comprised of wood fibers of up to 1.5 in. in length and contains up to 10 - 20 percent fines to aid in compaction.

2.2 Geotextile Fabric

Geotextile fabric provides a water permeable separation barrier between Impax engineered wood fiber and the drainage system. It holds the Impax engineered wood fiber in place and prevents the drainage system from clogging due to fines or decomposed Impax engineered wood fiber.

2.3 Wear Mats

Wear mats are used to limit the displacement of the Impax engineered wood fiber. Wear mats help provide stability of the Impax engineered wood fiber when installed under swings, slide exits and tire swings.

Part 3 Execution

3.1 General

A certified engineer, architect, or landscape architect familiar with local soil and climatic conditions should review instructions for base preparation and Impax engineered wood fiber installation to ensure appropriateness for local conditions.

Purchaser, or purchaser's representative, must determine and specify fall heights and equipment use zones as required by the Consumer Product Safety Commission's Handbook for Public Playground Safety, applicable ASTM standards, and state and local codes and regulations.

3.2 Base Preparation

For in-ground (i.e. on grade) installation excavate area to be covered with Impax engineered wood fiber to proper depth (8 in. for 8 in system, 12 in. for 12-in. system).

For above-ground installation, install retaining walls allowing for selected drainage system.

Both in-ground and above-ground installations should be properly graded. A 1 to 2 percent grade is recommended for proper drainage. The Impax engineered wood fiber system should not be installed in a grade exceeding 10 percent.

The substrate should be firmly compacted, especially when additional fill materials have been provided.

The substrate should be free of roots, stones and vegetation.

3.3 Drainage System Installation

Install playground equipment prior to installation of drainage system.

For above-ground systems, install retaining wall.

If manufactured drainage is being installed, refer to manufacturer's instructions for installation details.

If gravel drainage is used, first install geotextile fabric over sub-base. Overlap all seams a minimum of 3 in. Slit fabric to fit around equipment uprights. Where possible, overlap all slits with next piece of fabric.

Cover drainage system (either manufactured drainage or gravel) or earth substrate with geotextile fabric. Overlap all seams a minimum 3 in. Slit fabric to fit around equipment uprights. Where possible overlap at slits with next piece of fabric.

3.4 Impax Engineered Wood Fiber Installation

With permanent marker or warning label mark uprights of equipment with compacted system depth (i.e. 8 in. or 12 in.).

Install the Impax engineered wood fiber to the proper depth, mounding in the high traffic areas of the playground to allow for compaction. Use a Bobcat or a small front-end loader to spread surfacing. Operator should be careful not to travel on the fabric or turn sharply on the Impax engineered wood fiber. It will also be necessary to spread manually. Install all the material delivered and please note that the surfacing will be several inches above grade until it compacts. Impax engineered wood fiber needs to be compacted in order to be accessible to all. This can be achieved over time and usage, or with a mechanical compactor. Wetting down the initial load will help with compaction. (Always allow for extra Impax engineered wood fiber for compaction when ordering).

Install rubber mats in excessive wear areas, such as slide exits, under swings, and sliding poles.

For a smooth finished surface, hand rake. After two weeks of active use, surface should be raked again.

Periodical adjustments of Impax engineered wood fiber are required under slides, swings and other concentrated use zones. Installing mats in these areas will help control displacement in these high use zones. WARNING: Failure to maintain Impax engineered wood fiber at the initial installation depth may result in an injury and void your warranty.

Playground Surface Product Data Sheet Engineered Wood Fiber

Impax engineered wood fiber is a manufactured wood product from virgin hardwood or softwood. It is comprised of wood fibers of up to 1.5 in. in length and contains 10-20 percent fines to aid in compaction. Impax engineered wood fiber offers an exceptional combination of resiliency and firmness, which makes it an ideal playground surface. Careful manufacturing and quality control procedures keep bark, twigs, leaf debris and other organic material at a minimum.

CPSC and ASTM F1292-99 Critical Heights

System Depth, Inches Critical Height (less than 200 G-max and 1000 HIC), Feet

8 8

12 12

Accessibility

When properly installed and after manual or mechanical compaction, Impax engineered wood fiber is a firm, stable and slip resistant surface that meets the requirements of ASTM 1951-99, Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.

Physical Properties

Fines content, percent passing No. 16 sieve 20 percent, maximum

(ASTM C136-96A)

Flammability (ASTM D2859) Pass

Playground Surface Product Data Sheet Geotextile Fabric

Geotextile fabric is used with Impax engineered wood fiber to separate engineered wood fiber from the drainage system. It provides a water permeable barrier to hold the wood fiber in place and prevent fines and decomposed fiber from clogging the drainage system. (It should always be used whenever Impax engineered wood fiber is installed.)

Physical Properties

Thickness 28 mils, minimum

Water permeability 26 gallons/sq. ft./minute, minimum

Playground Surface Installation Instructions Engineered Wood Fiber

Introduction

It is recommended that all materials provided by the manufacturer, including product data, specifications, instructions and maintenance procedures, as well as all site specific plans, instructions and specifications, be reviewed by a certified engineer, architect or landscape architect familiar with local soil and climatic conditions.

Further, purchaser should determine and specify fall heights and equipment use zones as required by the Consumer Product Safety Commission's Handbook for Playground Public Safety, applicable ASTM standards, and state and local codes and regulations.

Installation Instructions

For in-ground (i.e. on grade) installations, excavate area to proper depth (12 in. for 12 in. system, 8 in. for 8 in. system).

Both in-ground and above-ground systems must be properly graded. A 1 to 2 percent grade is recommended for proper drainage. Impax engineered wood fiber systems should not be installed on grades exceeding 10 percent.

Substrate (for both in-ground and above-ground systems) must be firmly compacted, especially when additional fill material has been provided.

The substrate should be free of stones, roots and other vegetation.

Install playground equipment.

For above-ground systems, install retaining wall.

Install applicable drainage system.

If manufactured drainage is being used, place drainage strips on evenly spaced 6 ft. centers, or as specified by architect, in direction of grade. Refer to manufacturer's instructions for further details.

If gravel drainage is used, place 3 in. of drainage gravel on a layer of geotextile fabric. The lower end of the site should be connected to drainage to channel collected water away from the site. Overlap all seams a minimum of 3 in. Slit fabric to fit around equipment uprights. Where possible, overlap all slits with next piece of fabric.

Cover drainage system (either manufactured drainage or gravel) or earth substrate with geotextile fabric. Overlap all seams a minimum of 3 in. Slit fabric to fit around equipment uprights. Where possible, overlap at slits with next piece of fabric.

With permanent marker or warning label, mark uprights of equipment with compacted system depth (i.e. 8 in. or 12 in.).

Install the Impax engineered wood fiber to the proper depth, mounding in the high traffic areas of the playground to allow for compaction. Use a Bobcat or a small front-end loader to spread surfacing. Operator should be careful not to travel on the fabric or turn sharply on the Impax engineered wood fiber. It will also be necessary to spread manually. Install all the material delivered and please note that the surfacing will be several inches above grade until it compacts. Impax engineered wood fiber needs to be compacted in order to be accessible to all. This can be achieved over time and usage, or with a mechanical compactor. Wetting down the initial load will help with compaction. (Always allow for extra Impax engineered wood fiber for compaction when ordering).

Install wear mats in excessive wear areas, such as slide exits, under swings, and sliding poles.

For a smooth finished surface, hand rake. After two weeks of active use, surface should be raked again.

Periodical adjustments of Impax engineered wood fiber are required under slides, swings and other concentrated use zones. Installing mats in these areas will help control displacement in these high use zones. WARNING: Failure to maintain Impax engineered wood fiber at the initial installation depth may result in an injury and void your warranty.

Playground Surface Maintenance Instructions Engineered Wood Fiber

Heavy Use Areas

During routine inspections, heavily used areas such as under swings and at slide exits should be raked to maintain proper depth.

If heavy use areas are not raked for long periods of time, the depth of Impax engineered wood fiber may be reduced, lessening its impact attenuation properties.

Placement of wear mats in heavy use areas will reduce displacement of Impax engineered wood fiber in these areas.

Foreign Objects

Rake the play area level.

During routine inspection, remove any foreign objects such as glass, rocks, and litter.

Winter Weather

If sufficient moisture is retained in Impax engineered wood fiber, it will freeze at temperatures below 32°F (0°C). The engineered wood fiber surface should be checked when the temperature falls below freezing.

Moisture Retention

The moisture content of Impax engineered wood fiber is high because it is manufactured from virgin wood. Moisture helps the product retain its cushioning properties.

If you live in an arid climate with little rainfall, an occasional wetting down of the product will help it to retain moisture.

Top-offs

To maintain the Impax engineered wood fiber at the recommended (8 in. or 12 in.) depth, you will need to top-off the area every two to three years or as necessary to maintain proper depth and warranty.

When the Impax engineered wood fiber depth falls below the original compacted depth (marked on the playground uprights at the time of installation), contact the manufacturer's representative to order fresh material.

Engineered Wood Fiber Surfacing

TEN YEAR LIMITED WARRANTY

WHAT IS COVERED

- 1. The manufacturer warrants, to the original purchaser, that the Impax Engineered Wood Fiber surfacing system will meet ASTM F1292-99 at the specified critical height (8 ft. for an 8 in. depth of Impax Engineered Wood Fiber, 12 ft. for a 12 in. depth) for a period of ten (10) YEARS from the date of installation, subject to the conditions and exclusions shown below.
- 2. The manufacturer warrants, to the original purchaser, that the geotextile fabric of the installation will be free from defects upon delivery, subject to the conditions and exclusions shown below.
- 3. The manufacturer warrants, to the original purchaser, that the Impax Engineered Wood Fiber surfacing will be free from defects upon delivery, subject to the conditions and exclusions shown below.

If the Impax Engineered Wood Fiber surfacing installation is defective within the applicable warranty period, the manufacturer will, subject to the conditions set forth below, replace defective installation components at no charge within a reasonable period of time. Components used for replacement under this warranty are warranted for the remainder of the original warranty period. The replacement of defective components shall constitute the sole and exclusive remedy in the event of a breach of warranty.

EXCLUSIONS

Any defect, malfunction or failure caused by or resulting from improper installation, including insufficient drainage, service or maintenance, or from abuse, neglect, accident, vandalism, act of God, or any other cause beyond the control of the manufacturer will not be covered by this limited warranty.

4850 8" PLAY CURB

ISSUED/REVISED: 4/27/04

= INSTALLATION DETAIL

= PARTS LIST REFERENCE RECYCLED BLACK 4850 COLOR OPTION 4851

INSTRUCTIONS

NOTE: THIS INSTALLATION BOOKLET SHOULD BE KEPT INCUSTOMER'S FILE FOR FUTURE REFERENCE.

NOTE: Do not overtighten bolts. To overtighten may cause buckling or dimpling of some parts.

NOTE: Read installation instructions thoroughly before starting assembly. Pour concrete only after final assembly is complete. Bracing material may be required during assembly.

NOTE: It is important to check the hole location in the upright and on the drawings while assembling this unit.

NOTE: Place a brick or equivalent at the bottom of ground holes (where shown), to provide a solid foundation. Allow for this in hole depth.

HARDWARE: All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment, shall be service condition SC 2 (Moderate) Type II zinc plated with a yellow chromate conversion coating. (ASTM B-633-85)

SPECIFICATIONS

Recycled Playcurb: 0'-3 1/2" wide x 8" high x 4'-4 3/8" long rotational molded. 100% recycled/reclaimed linear low density polyethylene. Walls are 3/16" thick.

Color Option Playcurb: 0'-3 1/2" wide x 8" high x 4'-4 3/8" long rotational molded linear low density polyethylene. Walls are 3/16" thick.



TOP VIEW 4850/4851

NOTE: Due to this product being recycled, the colors of borders may vary slightly.

- 1. Install before backfilling with protective surfacing.
- 2. Dig holes according to Ground Plan. NOTE: Due to extremes in weather and soil conditions, hole sizes may have to be increased to meet local conditions.
- 3. Pour concrete into several footing holes and lay playcurbs in position over surface. Push stakes through the playcurbs and into concrete. Keep playcurbs straight and plumb. Continue this procedure until the entire play area is complete.
- 4. Allow 48 hours for concrete to set up before backfilling.

4854

ACCESSIBLE PLAY CURB

ISSUED/REVISED: 4/28/04

= INSTALLATION
DETAIL

PARTS LIST
REFERENCE

ACCESSIBLE PLAYCURB RECYCLED BLACK 4854
ACCESSIBLE PLAY CURB COLOR OPTION 4855
ACCESSIBLE PLAYCURB W/ ADAPTERS RECYCLED BLACK 4858
ACCESSIBLE PLAYCURB W/ ADAPTERS COLOR OPTION 4859

INSTRUCTIONS

NOTE: THIS INSTALLATION BOOKLET SHOULD BE KEPT INCUSTOMER'S FILE FOR FUTURE REFERENCE.

NOTE: Do not overtighten bolts. To overtighten may cause buckling or dimpling of some parts.

NOTE: Read installation instructions thoroughly before starting assembly. Pour concrete only after final assembly is complete. Bracing material may be required during assembly.

NOTE: It is important to check the hole location in the upright and on the drawings while assembling this unit.

NOTE: Place a brick or equivalent at the bottom of ground holes (where shown), to provide a solid foundation. Allow for this in hole depth.

HARDWARE: All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment, shall be service condition SC 2 (Moderate) Type II zinc plated with a yellow chromate conversion coating. (ASTM B-633-85)

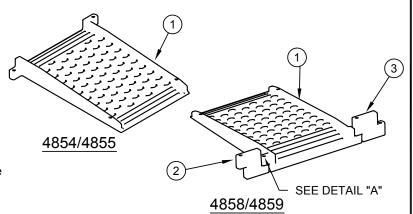
SPECIFICATIONS

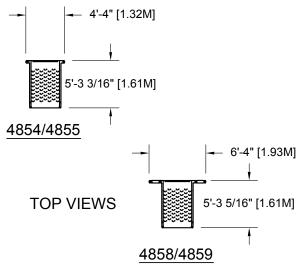
Recycled Adapter: 0'-3 1/2" Wide x 12" High x 1'-4" Long rotational molded. 100% recycled/reclaimed linear low density polyethylene. Walls are 3/16" thick.

Color Option Adapter: 0'-3 1/2" Wide x 12" High x 1'-4" Long rotational molded linear low density polyethylene. Walls are 3/16" thick. Recycled Accessible Play Curb: 4'-4" wide x 8" high x 5' 3 3/16" long rotational molded. 100% recycled/reclaimed linear low density polyethylene. Walls are 1/4" thick.

Color Option Accessible Play Curb: 4'-4" wide x 8" high x 5' 3 3/16" long rotational molded linear low density polyethylene. Walls are 1/4" thick.

NOTE: Due to this product being recycled, the colors of borders may vary slightly.





- 1. Install before backfilling with protective surfacing.
- 2. Dig holes according to Ground Plan. NOTE: Due to extremes in weather and soil conditions, hole sizes may have to be increased to meet local conditions.
- 3. Pour concrete into several footing holes and lay playcurbs in position over surface. Push stakes through the playcurbs and into concrete. Keep playcurbs straight and plumb. Continue this procedure until the entire play area is complete.
- 4. Allow 48 hours for concrete to set up before backfilling.

PrimeTime System Specifications 2005

PROVIDE #11642 Pirate's Cove PRIMETIME SYSTEM, AS DESCRIBED HEREIN, WITH A <u>CLAMPLESS</u> POSITIVE BOLT-THROUGH FASTENING SYSTEM, OR EQUAL, WITH 3 1/2" O.D. RECYCLED ALUMINUM SUPPORT POSTS OR GALVANIZED STEEL POSTS.

COLLARS OR CLAMPS WHICH WRAP AROUND SUPPORT POSTS SHALL NOT BE ACCEPTABLE NOR SHALL ANY CLAMP SYSTEM WHICH MUST BE FIELD-INSTALLED.

ALL DECKS SHALL CONNECT TO SUPPORT POSTS BY MEANS OF A THROUGH-BOLT CONNECTION. DECK/COLLAR ATTACHMENTS SHALL NOT BE ACCEPTABLE. ALL CLIMBING ATTACHMENTS SHALL INCLUDE A 15" WIDE DECK ENTRY ARCHWAY TO CONTROL DECK ACCESS TO ONE CHILD AT A TIME AND REDUCE THE LIKELIHOOD OF ACCIDENTAL EXITS AND PROVIDE ADA SECURITY.

MANUFACTURER MUST PROVIDE AS PART OF THEIR BID PACKAGE A FACSIMILE CERTIFICATE OR SIMILAR PROOF OF WARRANTIES EQUAL TO THE SPECIFIED SYSTEM AS FOLLOWS:

- LIFETIME LIMITED WARRANTY ON SUPPORT POSTS (UPRIGHTS)
- 10 YEAR LIMITED WARRANTY ON EXPANDED METAL AND PUNCHED STEEL DECKS, PIPES, RAILS, LOOPS AND RUNGS
- 10 YEAR LIMITED WARRANTY ON ROTO-MOLDED POLYETHELENE COMPONENTS
- 10 YEAR WARRANTY ON BOLT-THROUGH FASTENING SYSTEM
- LIFETIME LIMITED WARRANTY ON HARDWARE

ADDITIONALLY, PROOF OF AT LEAST \$51 MILLION MANUFACTURER'S PRODUCT LIABILITY INSURANCE, WRITTEN ON THE PREFERRED OCCURRENCE FORM, SHALL BE PROVIDED AS PART OF THE BID PACKAGE. NO PORTION OF THE INSURANCE COVERAGE SHALL BE SELF-INSURED. PRODUCT LIABILITY INSURANCE WRITTEN ON A "CLAIMS MADE" FORM SHALL NOT BE ACCEPTABLE.

MANUFACTURER SHALL BE ISO9001 CERTIFIED AND THE DESIGNER AND FACTORY-CERTIFIED INSTALLER SHALL BE CERTIFIED BY THE NATIONAL PLAYGROUND SAFETY INSTITUTE.





MANUFACTURER MUST SHOW **IPEMA** CERTIFICATION OF COMPLIANCE FOR <u>EACH</u> COMPONENT PROVING THAT THE PRODUCT CONFORMS WITH THE REQUIREMENTS OF ASTM F1487-01.

IF INCLUDED, INSTALLATION SHALL BE PERFORMED BY A FACTORY TRAINED AND NPSI CERTIFIED INSTALLER. INSTALLER SHALL ADHERE TO THE **FIVE-STAR PLUS INSTALLATION** FORMAT, TO GIVE THE GREATEST POSSIBLE VALUE TO THE OWNER.

General Specifications of Materials:

ENTRY ARCHWAY

All entry archways shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with vertical members fabricated of 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing and with 3/16" hot rolled steel formed mounting tabs. The entrance archways shall be an all welded assembly and shall be coated with a custom formula of TGIC polyester powder, after fabrication in conformance with the specifications outlined herein.

HARDWARE

All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 304 alloy stainless steel. Fasteners with yellow dichromate treatment have an electrodeposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing. All primary stainless steel fasteners shall be Button Head Socket Caps.

POWDER COAT FINISH

Shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a six stage bath system with an iron phosphate wash, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794- 69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D 2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Over-bake Stability 100% at 400 degrees Fahrenheit.

ROTATIONALLY MOLDED PRODUCTS

All polyethylene shall be linear low-density material with UV-stabilized color and an anti-static compound additive. All rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D-1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD).

Uprights and Upright Accessories:

BOLT-THROUGH CONNECTION

Each PrimeTime/TotTime component is bolted directly into the upright post and designed to eliminate exposed hardware and protrusions. Minimum tensile strength of the connection shall be 45,000 psi, minimum yield strength shall be 22,000 psi. All necessary connectors shall be engineered, manufactured and factory installed as an integral part of the upright post. For added protection against corrosion, cold galvanizing shall be applied to the edges of each drilled hole.

UPRIGHTS

All upright posts shall have a finished grade line marking to indicate the correct playground safety surface level. All upright posts shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.

UPRIGHTS - ALUMINUM

Shall be 3.5" outside diameter tubing, 1/8" wall thickness, extruded from 6005-T5 aluminum alloy conforming to ASTM-B-221. Minimum yield strength shall be 35,000 psi and minimum tensile strength shall be 38,000 psi.

UPRIGHT CAPS

The standard upright cap shall be an aluminum cap, cast from a 383 alloy, powder coated to match the upright. Every upright cap shall be anodized for maximum protection. All upright caps are permanently installed at the factory using aluminum self-sealing rivets.

Punched Steel & Coated Components:

PUNCHED STEEL DECKS

Punched steel decks shall be fabricated from 12 gauge punched steel with a protective p&o finish and other punched steel products shall be fabricated from 11 gauge punched steel with a protective p&o finish. Coated products shall consist of a welded assembly with an oven cured matte finish polyvinyl chloride (PVC) coating with a minimum coating thickness of .080". The PVC coating shall have a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. For ADA Ramp Accessible decks and ramps, the hole shall measure 1/4" diameter after coating. For standard decks and ramps, the hole size shall measure 1-1/4" diameter after coating.

DECKS - SQUARE

Shall have a minimum surface area of 1,286 square inches, maintaining a full 36" center to center spacing on the upright posts. The 36" square deck shall be fabricated from punched steel in conformance with the specifications outlined herein. The deck frame shall be fabricated from 3/16" x 2-1/2" hot rolled steel with corner supports fabricated from 1/4" x 2-1/2" hot rolled steel. Intermediate supports, fabricated from 1/8" x 1" hot rolled steel, shall be notched and welded at the intersections forming a support grid underneath the entire deck surface. The deck shall be a one-piece welded assembly, coated after fabrication with an oven cured matte finish polyvinyl chloride (PVC) coating in accordance with the specifications herein. Each square deck shall be directly bolted to the upright posts with four 3/8" diameter button head cap screws in accordance with the hardware specifications herein.

DECKS - TRIANGULAR

Shall have a minimum surface area of 556 square inches, maintaining a full 36" center to center spacing on the upright posts. The 36" triangular deck shall be fabricated from punched steel in conformance with the specifications outlined herein. The deck frame shall be fabricated from 3/16" x 2-1/2" hot rolled steel with corner supports fabricated from 1/4" x 2-1/2" hot rolled steel. Intermediate supports, fabricated from 1/8" x 1" hot rolled steel, shall be welded at the intersections forming a support grid underneath the deck surface. The deck shall be a one-piece welded assembly, coated after fabrication with an oven cured matte finish polyvinyl chloride (PVC) coating in accordance with the specifications herein. Each triangular deck shall be directly bolted to the upright posts with three 3/8" diameter button head cap screws in accordance with the hardware specifications herein.

STAIRS

Stair assemblies shall be made from punched steel in conformance with the specifications outlined herein. Stair stringers shall be made from 11 gauge (.120" thick) hot rolled flat steel. Stairs and stringers shall be an all welded assembly finished with the matte PVC coating per the specifications herein. Ladder handrails shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. The handrails shall an all welded assembly and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

TRANSFER POINT

The Platform and Steps shall each be made from 11 gauge punched steel with a protective p&o finish in conformance with the specifications outlined herein. The Platform and Steps shall each be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. The steps shall have a minimum of 355 square inches of area per step and shall descend in increments of 8" or less, as specified by the Americans with Disabilities Act (ADA). Handrails and attachment rails shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing, with supports fabricated from 1-1/16" O.D. x 15 gauge (.075" thick) galvanized steel tubing and 2" square x 3/16" wall steel tubing. Platform support shall be fabricated from 5" O.D tubing with a 3/16" hot rolled flat steel flange. Handholds, attachment rails and platform supports shall be all-welded assemblies and shall be coated with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein, after fabrication.

TRANSFER POINT, ACCESS ATTACHMENT

The Platform shall be made from 11 gauge punched steel with a protective p&o finish in conformance with the specifications outlined herein. The platform shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. The platform support shall be fabricated from 5" O.D tubing with a 3/16" hot rolled flat steel flange. The platform support shall be an all-welded assembly and shall be coated with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein, after fabrication.

Roofs and Arches:

PYRAMID ROOF

Roof shall be one-piece, rotationally molded linear low-density polyethylene conforming to the specifications outlined herein. Roof brackets shall be formed of 3/16" hot rolled flat steel with an all welded construction and shall have a custom formula of TGIC powder coating in conformance with the specifications outlined herein.

Bridges:

ARCH BRIDGE

Arch bridge shall have a minimum surface area of 1,945 square inches. The bridge sections shall be fabricated from punched steel in conformance with the specifications outlined herein. Each bridge section shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. The bridge frame shall be fabricated from 3/16" x 2-1/2" hot rolled steel with the intermediate supports fabricated from 1/8" x 1" hot rolled steel. Arch bridge protective barrier or guardrail shall be an all welded assembly of a formed 1-5/8" O.D. x 14 gauge (.083" thick) galvanized steel tubing and 1-1/16" O.D. x 15 gauge (.075" thick) galvanized steel tubing vertical rungs. After fabrication, the protective barrier or guardrail assembly shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein.

MINI-ARCH BRIDGE

Mini-Arch bridge shall have a minimum surface area of 1,081 square inches. The bridge sections shall be fabricated from punched steel in conformance with the specifications outlined herein. Each bridge section shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. The bridge frame shall be fabricated from 3/16" x 3" hot rolled steel with the intermediate supports fabricated from 1/8" x 1" hot rolled steel. Arch bridge protective barrier or guardrail shall be an all welded assembly of a formed 1-5/8" O.D. x 14 gauge (.083" thick) galvanized steel tubing and 1-1/16" O.D. x 15 gauge (.075" thick) galvanized steel tubing vertical rungs. After fabrication, the protective barrier or guardrail assembly shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein.

SUSPENSION BRIDGE

Expanded metal footboards shall be fabricated from punched steel in conformance with the specifications outlined herein. The footboard frame shall be fabricated from 1/8" x 2-1/2" hot rolled steel. Each footboard shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. Mounting boards shall be fabricated from 3/16" hot rolled flat steel, 3/16" x 1-3/4" hot rolled flat steel, 3/16" x 2-1/2" hot rolled flat steel and 1/4" x 1-3/4" hot rolled flat steel. Mounting boards shall be a one-piece welded assembly. Suspension bridge guardrail shall be an all welded construction of a formed 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing and 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing vertical rungs. The handrail assembly shall be coated with a custom formula of TGIC polyester powder, after fabrication in conformance with the specifications outlined herein.

Climbers:

ARCH CLIMBER

The arch climber side rails shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. The cross rungs shall be fabricated from 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing with 3/16" hot rolled steel formed tabs. The arch climber assembly shall be an all welded construction and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

CORKSCREW CLIMBER

The corkscrew, main upright and top bar shall be fabricated from 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing. Mounting tabs shall be formed 3/16" hot rolled flat steel. The corkscrew climber assembly shall be an all welded assembly and shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

TREE CLIMBER

Tree climber shall be fabricated from 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing, 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing and 3/16" formed steel mounting tab. Tree climber shall be a one-piece welded assembly and shall be coated with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein, after fabrication.

Crawl Tubes:

ROTATIONALLY MOLDED CRAWL TUBES, 24" INSIDE DIAMETER

The 24" I.D. x ¼" nominal wall thickness tube and 1-7/8" connecting panels shall be rotationally molded linear low-density polyethylene conforming to the roto-mold specifications outlined herein. Tube sections shall be molded so that all hardware connections are on the outside of the tube.

Panels:

INTERACTIVE PANELS

The cap and game pieces shall be constructed from color impregnated rotationally molded linear low density polyethylene with the appropriate graphics rotationally molded into the material. The nine game pieces shall include molded-in graphics on both sides. The rungs shall be fabricated of 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. All rotationally molded polyethylene products shall conform to the rotationally molded specifications outlined herein. Enclosure frame shall be fabricated from 1-5/16" O.D. x .083"(14 gauge) wall galvanized steel tubing and 3/16" formed hot rolled steel tabs. Enclosure frame shall be an all welded assembly and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

IMAGINATION PANELS (RACETIME, 911 RESCUE, FIRE ENGINE PANEL)

Shall be 1-7/8" thick, color impregnated linear low density polyethylene and shall conform to the rotationally molded specifications outlined herein. The window for the RaceTime, Fire Engine and Rescue 911 panels shall be a clear polycarbonate 1/8" thick. All graphics shall be rotationally molded into the panel.

METAL RUNG ENCLOSURES

The rung enclosure shall be fabricated of 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. The vertical rungs shall be fabricated of 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. The rung enclosure shall be an all welded assembly and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

MIRROR PANEL, WAVY

The frame panel shall be made from 3/4" thick (solid) high density, UV-stabilized and color impregnated polyethylene and shall confirm to the specifications for HDPE panels herein. The mirror shall be fabricated from 18 gauge (.05" thick) and 26 gauge (.019" thick) type 430 bright annealed mirror-finished stainless steel.

TALK TUBES

The Funnel shall be fabricated from 12 gauge (.1084" thick) galvanealed steel with 14 gauge perforated steel and 2-3/8" O.D. x .095" (13 gauge) galvanized steel tubing. The funnel shall be an all welded structure and shall be coated with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein. The piping shall be 1 ¼" PVC in ten-foot lengths.

Slides:

CURVED SLIDE

The slide shall be color impregnated linear low density polyethylene and shall conform to the rotationally molded specifications outlined herein. The bedway shall be 17-3/4" wide (inside) with sides that are 6" high at the top of the slide, tapering to 4 1/2" high at the runout when measured from the bedway surface. All slides shall be of double wall construction with a 1/4" nominal wall thickness. The entrance section shall have a flat 'sit-down' area 17-3/4" wide x 12" long. The side walls in this area shall be 20" high (measured from the slide surface) and shall be molded into the entrance section. The exit section of the bedway shall have a 40" radius for a smooth transition from the slide chute to the run-out area. The flat run-out area shall be 12" long to slow the user for proper exit.

ROTATIONALLY MOLDED 24" TUBE SLIDES

The 24" tube sections and entrance panel shall be color impregnated rotationally molded linear low density polyethylene. The tube sections shall have a 24" inside diameter with 1/4" nominal wall thickness. Tube sections shall be molded so that all hardware connections are on the outside of the tube. The joints shall be internal. All rotationally molded polyethylene products shall conform to the rotationally molded product specifications outlined herein.

WAVE SLIDE

The slides shall be color impregnated linear low density polyethylene and shall conform to the rotationally molded specifications outlined herein. The bedway shall be 17-3/4" wide (inside) with sides that are 6" high when measured from the bedway surface. All slides shall be of double wall construction with a 1/4" nominal wall thickness. The entrance section shall have a flat 'sit-down' area 17-3/4" wide x 12" long. The side walls in this area shall be 20" high (measured from the slide surface) and shall be molded into the entrance section. The exit section of the bedway shall have a 40" radius for a smooth transition from the slide chute to the run-out area. The flat run-out area shall be 12" long to slow the user for proper exit.



PowerScape Plus System Specifications 2005

PROVIDE **POWERSCAPE PLUS® #85150 Champions Challenge SYSTEM** AS DESCRIBED HEREIN, WITH A POSITIVE BOLT-THROUGH **POWERLOCK** FASTENING SYSTEM, OR EQUAL, WITH 5" O.D. RECYCLED ALUMINUM SUPPORT POSTS or GALVANIZED STEEL POSTS.

COLLARS OR CLAMPS WHICH WRAP AROUND SUPPORT POSTS SHALL NOT BE ACCEPTABLE NOR SHALL ANY CLAMP SYSTEM WHICH MUST BE FIELD-INSTALLED.

ALL DECKS SHALL CONNECT TO SUPPORT POSTS BY MEANS OF A THROUGH-BOLT CONNECTION. DECK/COLLAR ATTACHMENTS SHALL NOT BE ACCEPTABLE. ALL CLIMBING ATTACHMENTS SHALL INCLUDE A 15" WIDE DECK ENTRY ARCHWAY TO CONTROL DECK ACCESS TO ONE CHILD AT A TIME AND REDUCE THE LIKELIHOOD OF ACCIDENTAL EXITS AND PROVIDE ADA SECURITY.

MANUFACTURER MUST PROVIDE AS PART OF THEIR BID PACKAGE A FACSIMILE CERTIFICATE OR SIMILAR PROOF OF WARRANTIES EQUAL TO THE SPECIFIED SYSTEM AS FOLLOWS:

- LIFETIME LIMITED WARRANTY ON SUPPORT POSTS (UPRIGHTS)
- 15 YEAR LIMITED WARRANTY ON EXPANDED METAL AND PUNCHED STEEL DECKS, PIPES, RAILS, LOOPS AND RUNGS
- 10 YEAR LIMITED WARRANTY ON ROTO-MOLDED POLYETHYLENE COMPONENTS
- LIFETIME LIMITED WARRANTY ON POWERLOCK AND HARDWARE

ADDITIONALLY, PROOF OF AT LEAST \$51 MILLION MANUFACTURER'S PRODUCT LIABILITY INSURANCE, WRITTEN ON THE PREFERRED OCCURRENCE FORM, SHALL BE PROVIDED AS PART OF THE BID PACKAGE. NO PORTION OF THE INSURANCE COVERAGE SHALL BE SELF-INSURED. PRODUCT LIABILITY INSURANCE WRITTEN ON A "CLAIMS MADE" FORM SHALL NOT BE ACCEPTABLE.

MANUFACTURER SHALL BE ISO9001 CERTIFIED AND THE DESIGNER AND FACTORY-CERTIFIED INSTALLER SHALL BE CERTIFIED BY THE NATIONAL PLAYGROUND SAFETY INSTITUTE.





MANUFACTURER MUST SHOW **IPEMA** CERTIFICATION OF COMPLIANCE FOR <u>EACH</u> COMPONENT PROVING THAT THE PRODUCT CONFORMS WITH THE REQUIREMENTS OF ASTM F1487-01.

IF INCLUDED, INSTALLATION SHALL BE PERFORMED BY A FACTORY TRAINED AND NPSI CERTIFIED INSTALLER. INSTALLER SHALL ADHERE TO THE **FIVE-STAR PLUS INSTALLATION** FORMAT, TO GIVE THE GREATEST POSSIBLE VALUE TO THE OWNER.



General Specifications of Materials:

ENTRY ARCHWAY

All entry archways shall be fabricated from 1 5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with vertical members fabricated of 1 1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. The entrance archways shall be an all welded assembly and shall be coated with a custom formula of TGIC polyester powder, after fabrication in conformance with the specifications outlined herein.

HANDHOLDS

All PowerScape Plus handholds shall be fabricated from 1-5/16" O.D., 14 gauge (.083") wall galvanized steel tubing. If vertical spacers are required, they shall be manufactured from 1-1/16" O.D., 15 gauge (.075") wall galvanized steel tubing. The handholds shall be a one-piece welded assembly and shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.

HARDWARE

All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 304 alloy stainless steel. Fasteners with yellow dichromate treatment have an electro-deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing. PowerScape Plus stainless steel fasteners shall be button pin-in head, hex socket cap screws with a two-part epoxy locking patch added to the threads. The two-part locking patch shall consist of one part resin and one part catalyst which are activated during installation. After curing, the material shall require a minimum of five times the installation torque to remove the fastener. Manufacturer shall provide special installation tools for pinned fasteners.

POWDER COAT FINISH

Shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a six stage bath system with an iron phosphate wash, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794- 69), Wedge Bend (ASTM D-522-68), Adhesion (Cross Hatch ASTM D-3359 & Knife Scratch ASTM D-2197), Environmental (Stain Resistance ASTM D-1308, Humidity ASTM D-2247 - 87, Salt Spray ASTM B-117 & Fadometer 300 hrs with no loss of gloss), Over-bake Stability 100% at 400 degrees Fahrenheit.

ROTATIONALLY MOLDED PRODUCTS

All polyethylene shall be linear low-density material with UV-stabilized color and an anti-static compound additive. All rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D- 1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD).

STEERING WHEELS

Available in plastic and aluminum. The plastic steering wheel shall be molded of a durable proprietary plastic. The steering wheel will withstand an impact of over 250 foot-pounds. The steering wheel is approximately 13-3/4" in diameter. The aluminum steering wheel is formed of solid 13 gauge aluminum with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein. The solid steering wheel is 12-5/8" in diameter.



Uprights and Upright Accessories:

POWERLOCK CONNECTION

The Patented assemblies shall incorporate two die cast aluminum parts, in a distinctive purpose mounting system that allows a rung panel to mount to the upright. The Powerlock connector will have a matching counterpart for flat panel connections. Each is bolted directly into the upright post through a factory located and installed connection and designed to eliminate exposed hardware and protrusions. Each shall be die cast of 383 aluminum alloy, to resist corrosion. Minimum tensile strength shall be 45,000 psi, minimum yield strength shall be 22,000 psi. Every Powerlock shall be anodized for maximum protection. Powerlock mounting hardware shall not be exposed, virtually eliminating tampering by vandals. All connectors shall be coated with a custom formula of TGIC polyester powder coating, in conformance with the specifications outlined herein.

UPRIGHTS, ALUMINUM

Shall be 5"outside diameter tubing, 1/8" wall thickness, extruded from 6005-T5 aluminum alloy conforming to ASTM-B-221. Minimum yield strength shall be 35,000 psi and minimum tensile strength shall be 38,000 psi. All upright posts shall have a finished grade line marking to indicate the correct playground safety surface level. All upright posts shall be coated with a custom formula TGIC polyester powder coating in conformance with the specifications outlined herein.

UPRIGHT CAPS

The standard upright cap shall be an aluminum cap, cast from a 383 alloy, powder coated to match the upright. Every upright cap shall receive a primer coat for maximum protection. All upright caps are permanently installed at the factory using aluminum self-sealing rivets.

Punched Steel & Coated Components:

PUNCHED STEEL DECKS AND PVC COATED COMPONENTS

All punched steel products shall be fabricated from 11 gauge punched steel with a protective p&o finish. Coated products shall consist of a welded assembly with an oven cured matte finish polyvinyl chloride (PVC) coating with a minimum coating thickness of .080". All decks shall be exclusively dipped utilizing the DuraWear process with an extra thick coating on the top of the deck. The PVC coating shall have a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. For ADA Ramp Accessible decks and ramps, the hole shall measure 1/4" diameter after coating. For standard decks and ramps, the hole size shall measure 1 1/4" diameter after coating.

CROW'S NEST

Shall have a minimum surface area of 501 square inches. The deck shall be fabricated in conformance with the punched steel specifications outlined herein. The deck frame shall be fabricated from 3/16" x 3-1/2" hot rolled steel with the intermediate supports fabricated from 1/8" x 2-1/2" hot rolled steel. The deck shall be a one-piece welded assembly.

DECKS, SQUARE

Shall have a minimum surface area of 2,381 square inches, maintaining a full 49" center to center spacing on the upright posts. The 49" square deck shall be fabricated in conformance with the punched steel specifications outlined herein. The deck frame shall be fabricated from 3/16" x 3-1/2" hot rolled steel with corner supports fabricated from 1/4" x 3-1/2" hot rolled steel. Intermediate supports, fabricated from 1/8" x 2-1/2" hot rolled steel, shall be notched and welded at the intersections forming a rigid 12" support grid underneath the entire deck surface. The deck shall be a one-piece welded assembly, coated after fabrication with an oven cured matte finish polyvinyl chloride (PVC) coating in accordance with the specifications herein. The square deck shall be directly bolted to the upright posts with eight 3/8" diameter button-pin-inhead, hex socket cap screws in accordance with the hardware specifications herein.



DECKS, TRIANGULAR

Shall have a minimum surface area of 1,039 square inches, maintaining a full 49" center to center spacing on the upright posts. The triangular platform shall be fabricated in conformance with the punched steel specifications outlined herein. The deck frame shall be fabricated from 3/16" x 3-1/2" hot rolled steel with corner supports fabricated from 1/4" x 3-1/2" hot rolled steel. Intermediate supports, fabricated from 1/8" x 2-1/2" hot rolled steel, shall be welded at the intersections forming a rigid support grid underneath the deck surface. The deck shall be a one-piece welded assembly, coated after fabrication with an oven cured matte finish polyvinyl chloride (PVC) coating in accordance with the specifications herein. Each triangular deck shall be directly bolted to the upright posts with six 3/8" diameter button-pin-in-head, hex socket cap screws in accordance with the hardware specifications herein.

TRANSFER POINT

The Platform and Steps shall each be made from 11 gauge punched steel with a protective p&o finish in conformance with the specifications outlined herein. The Platform and Steps shall each be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. The steps shall descend in increments of 8" or less, as specified by the Americans with Disabilities Act (ADA). Handrails and attachment rails shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing, with supports fabricated from 1-1/16" O.D. x 15 gauge (.075" thick) galvanized steel tubing. Platform support shall be fabricated from 5" O.D tubing with a 3/16" hot rolled flat steel flange. Handholds, attachment rails and platform supports shall be all-welded assemblies and shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein.

TRANSFER POINT, OPTIONAL ACCESS ATTACHMENT

The Platform shall be made from 11 gauge punched steel with a protective p&o finish in conformance with the specifications outlined herein. The platform shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. The platform support shall be fabricated from 5" O.D tubing with a 3/16" hot rolled flat steel flange. The platform support shall be an all-welded assembly and shall be coated with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein, after fabrication.

STEP PLATFORMS

The step platforms shall be made from 11 gauge punched steel with a protective P&O finish in conformance with the specifications outlined herein. The step platforms shall be a one-piece welded assembly finished with the matte PVC coating per the specifications herein. Handrails and attachment rails shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing, with supports fabricated from 1-1/16" O.D. x 15 gauge (.075" thick) galvanized steel tubing and 2" square x 3/16" wall steel tubing. Handholds, and attachment rails shall be all-welded assemblies and shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein.

Roofs and Arches:

DOME ROOF

Roof shall bolt directly to the four uprights and be one-piece, double-wall rotationally molded linear low-density polyethylene conforming to the specifications outlined herein.

Bridges:

FUNNEL BRIDGE

The bridge sections shall be fabricated from punched steel in conformance with the specifications outlined herein. Each bridge section shall be a one- piece welded assembly finished with the matte PVC coating per the specifications herein. The bridge frame shall be fabricated from 3/16" x 3-1/2" hot rolled steel with the intermediate supports fabricated from 1/8" x 1" hot rolled steel. Funnel bridge protective barriers shall be an all welded construction of a formed 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing and 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing vertical rungs. The protective barrier assembly shall be coated with a custom formula of TGIC polyester powder, after fabrication in conformance with the specifications outlined herein. The PowerScape Plus funnel bridge shall include two entry archways in accordance with the specifications herein



Climbers:

CARGO NET WALL

The net assembly shall be constructed from galvanized, 7/32", 4/0 welded link chain. Cross members for the net shall be fabricated from 1-1/16" x .075" (15 gauge) wall galvanized steel tubing. The net shall be a welded assembly. The net assembly shall be coated in conformance with the PVC specifications outlined herein. The net assembly shall attach to the top rail using 3/8" hardware. The anchoring system shall consist of formed 1-1/16" x .075" (15 gauge) wall galvanized steel tubing. The top rail shall be an all welded construction with a custom formula of TGIC polyester powder coating, after fabrication, in conformance with the specifications outlined herein.

COASTER CLIMBER

The coaster climber side rails shall be fabricated from 1-7/8" O.D. x .095" (13 gauge) wall galvanized steel tubing. The cross rungs shall be fabricated from 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing. The arch climber assembly shall be an all welded construction and shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication. PowerScape Plus coaster climber shall include entry archway(s) in accordance with the specifications herein.

DOUBLE CLIMBER

Shall be fabricated from 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing uprights and step rungs of 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with 3/16" x 2" hot rolled flat steel mounting plate. The climber assembly shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein. PowerScape Plus Double Climber shall include an entry archway in accordance with the specifications herein.

LOOP LADDER

The loop ladder side rails shall be fabricated from 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing. The loops shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. The ladder assembly shall be an all welded construction and shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein. The PowerScape Plus loop ladder shall include an entry archway in accordance with the specifications herein.

MEGAROCK & CASTLE ROCK CLIMBERS

Shall be color impregnated rotationally molded linear low density polyethylene conforming to the specifications outlined herein. The double wall part shall have a minimum wall thickness of 3/8". MegaRock shall pass a weight test with a static load of more than four thousand (4000) pounds. The climber is a spherical section that shall be bolted up singularly or in dual configurations to adjacent 5' high platforms. MegaRock is an amorphously shaped structure resembling a multitiered mountain face with hundreds of different climbing paths to the peak. Three (3) molded-in handholds are dispersed along the face of the structure. A funneling system incorporated into the top face deters users from straying too close to the edge, and "funnels" them towards the deck. The underside of the wall is a cave with a molded-in dinosaur fossil relief of an adolescent Albertosaurus. The texture of the top face and cave of MegaRock resembles actual rock and provides children with the tactile sensation of "being in the wild." The part shall be secured to the ground with footbuck supports.

PowerScape Plus MegaRock shall include an two handholds in accordance with the specifications herein. PowerScape Plus Castle Rock shall include a two-color theme panel which has the appearance of a stone castle entrance. The materials for this entrance panel shall comply with the specifications for POWERSCAPE PLUS HDPE DISCOVERY PANELS herein.

MegaRock Technical Specifications

Deck Height: 5' Width-Peak: 48 7/8" Width-Base: 114 5/8" # Plateaus: 17

of Climbing Paths: 100's Molded-in Hand Holds: 3



- -The design has been approved by an independent safety consultant
- -One-piece rotationally molded design
- -Flush mounts with deck
- -Each MegaRock is completely modular with another MegaRock within a dome configuration
- -Authentic molded-in Albertosaurus fossil on cave portion (backside) of
- -MegaRock provides children with another "play while you learn" activity
- -Molded-in texture gives MegaRock a genuine rock-like feel

RUNG LADDER

Shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with horizontal members fabricated of 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. The ladder assembly shall be an all-welded construction and coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein. PowerScape Plus rung ladder shall include an entry archway in accordance with the specifications herein.

SIDE STEPPER CLIMBER

Shall be fabricated from 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing climbing bar. The Side Stepper climber shall have a handrail of 1.029" x .083" (14 gauge) wall galvanized steel tubing. The Side Stepper climber assembly shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein. PowerScape Plus Side Stepper climbers shall include an Offset Entry Archway in accordance with the specifications herein.

TRUNK CLIMBER

The Upper Climber assembly shall be an all welded one-piece construction from 3/16" (.188") hot rolled steel, 1-5/16" x 14 gauge (.083") wall and from 1-7/8" O.D. by .095" (13 gauge) wall galvanized tubing. The Side and Center Supports assembly shall be an all welded one-piece construction from 1-7/8" O.D. by .095" (13 gauge) wall galvanized tubing and 3/16" (.188") hot rolled steel. The Bottom Rungs are from 1-7/8" O.D. by .095" (13 gauge) wall galvanized tubing and threaded inserts in each end. The Deck Rungs are from 1-5/16" x 14 gauge (.083") wall galvanized tubing. All the parts are powder coated after fabrication with a custom formula of TGIC polyester in conformance with the specifications outlined herein.

TWISTER CLIMBER

The twister climber inner and outer rails shall be fabricated from 1 5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing. The rungs shall be fabricated from 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. The twister climber assembly shall be an all welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein. PowerScape Plus twister climber shall include an entry archway in accordance with the specifications herein.

WALLCANO - VOLCANO CLIMBERS

Shall be one to three double wall, one-piece construction of color impregnated rotationally molded linear low density polyethylene pieces with a 1/4" nominal wall thickness. The Grips are four organic variations injection molded of polyethylene. The Attachment Grate, Lava Handholds and Crossbar Entry shall be fabricated from 1-1/16" O.D. x .075" (15 gauge) wall, 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing and 1/8" hot rolled flat steel. The Struts shall be fabricated from 1 7/8" O.D. x .095" (13 gauge) wall galvanized steel tubing and 1/4" hot rolled steel mounting tabs. The Footbuck shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing and 1/8" hot rolled flat steel. The Attachment Grate, Lava Handholds, Crossbar Entry, Struts and Footbuck shall be all welded assemblies and shall be coated, after fabrication, with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein. All rotationally molded polyethylene products shall conform to the rotationally molded specifications outlined herein.



COSMIX CLIMBER

This one-piece climber shall be color impregnated linear low density polyethylene with UV-stabilized color and an anti-static compound additives. The climber shall have a nominal wall thickness of 1/4" and utilizes "holes" to allow the user to ascend and descend at their level of ability. The Footbucks shall be all welded construction of SCH. 40 1 7/8" O.D. galvanized steel pipe with a 1/8" X 1" X 1 13/16" flat stainless steel tab and shall be coated with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein, after fabrication. The Cosmix Climber shall include an offset entry archway in accordance with the specifications herein and shall be bolted up singularly to a platform.

POLY CLIMBING WALL

The Poly Climbing Wall shall be made from 3/4" thick (solid) high density, UV-stabilized, laminated and color impregnated polyethylene. The PolyWall Support Pipe assembly shall be an all welded one-piece construction from 1-7/8" O.D. by .095" (13 gauge) wall galvanized tubing and 3/16" (.188") hot rolled steel tabs. The Grips are four organic variations injection molded of polyethylene. All the metal parts are powder coated with a custom formula of TGIC polyester in conformance with the specifications outlined herein, after fabrication.

Panels:

CONTOURED SEAT

The contoured seat panels shall be fabricated from 11 gauge (.120") galvannealed steel. The contoured seat panel frame shall be fabricated from 1-5/16" x 14 gauge (.083") wall and 1-1/16" x 15 gauge (.075") wall galvanized steel tubing. The contoured seat shall be an all welded assembly powder coated after fabrication with a custom formula of TGIC polyester in conformance with the specifications outlined herein.

FUNNEL ENCLOSURE

The funnel enclosure shall be fabricated of 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. The vertical rungs shall be fabricated of 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. The funnel enclosure shall be an all welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein.

SINGLE SEAT

The Single Seat shall consist of a 13 $\frac{1}{2}$ " Dia. cast aluminum seat mounted to a 1.66" OD x .083" (14 gauge) pipe (seat arm) via $\frac{1}{2}$ " set screw. It shall be coated after fabrication with a custom formula of TGIC polyester powder in conformance with the specifications outlined herein. The seat arm is bolted to an upright with a mounting tab that is welded to the end of the pipe.

SINGLE GIZMO PANEL

Gizmo panel shall be 2-1/2" thick, color impregnated linear low density polyethylene and shall conform to the rotationally molded specifications outlined herein. The Pipe Connector shall be an all welded structure fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing and 3/16" stainless steel. The Pipe Connector shall be coated with a custom formula of TGIC polyester powder, after fabrication in conformance with the specifications outlined herein. Gizmo's shall conform to the Gizmo specifications outlined herein.

GIZMO'S

The Wheel Housing, Window Housings and Cap shall be injection molded from color impregnated high density polyethylene. The Maze Bubble shall be injection molded from clear ABS plastic. The Echo Chamber, Answer Wheel, Knob, Maze, and Click Wheel shall be injection molded from color impregnated ABS plastic. The Bushing shall be injection molded Acetal. The Bubble Mirror shall be vacuumed formed of 3/16" thick polycarbonate with a mirror finish applied to the concave side. The Flat Mirror shall be 1/8" thick Polycarbonate with a mirror finish applied to one side. The Stained Glass shall be 3/16" translucent Polycarbonate.



Slides:

WILDSLIDE

This multi-sectional rotationally molded open-bedway slide shall be manufactured from color impregnated linear low density polyethylene and shall conform to the rotationally molded product specifications outlined herein. Entry to the slide incorporates a tunnel access. The slide bedway shall have a 20" inside diameter on a 40° maximum slope so that each section will decrease in height by 12". The Double Entrance includes a triangular shaped platform filler that shall be fabricated from 11 gauge punched steel with a protective p&o finish in conformance with the specifications outlined herein. The platform filler shall be a one-piece assembly finished with the matte PVC coating per the specifications herein. The slides will be offered on 4', 5', 6', 7', and 8' deck heights. Entrance, Double Entrance, 1'Exit, 2' Exit, Straight, Spiral, Left, and Right sections shall be molded so that they overlap externally at each junction and all hardware connections are located on the outside of the sections. All sections shall be of double wall construction with a nominal wall thickness of 1/4". The exit sections features a molded-in pedestal. Slides of 5',6', 7', and 8' deck heights will use 3' or 4' slide supports.

WISHBONE SLIDE

The slides and cross bar shall be color impregnated linear low density polyethylene and shall conform to the rotationally molded specifications outlined herein. The Wishbone Slide shall be manufactured from two (2) FlipSlides, one right exiting and one left exiting slide. The slides shall be connected at the entrance region by a filler piece, manufactured of linear low density polyethylene. The mounting bracket shall be 3/16" x 2-1/2" hot rolled steel, PVC coated in conformance with the specifications herein. The vertical bar shall be a one-piece welded assembly and shall be coated after fabrication with a custom formula of TGIC polyester powder, in conformance with the specifications outlined herein.

Challenge Station Climber

Challenge Station Climber Base

Main Climber: Shall be fabricated from 1 7/8" O.D. 13 gauge (.095") galvanized steel tubing, 1 1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing, ¼" thick hot rolled flat steel supports and 3/16" thick hot rolled flat steel mounting tabs. The Main Climber shall be all welded construction.

Center Pole: Shall be fabricated from 1 7/8" O.D. 13 gauge (.095") galvanized steel tubing, the angle cut sockets shall be fabricated from 1 5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. The Center Pole shall be all welded construction.

Side Support Pipe: Shall be fabricated from 1 5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing.

Upper Ring: Shall be fabricated from 1 5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing and 3/16" thick hot rolled flat steel mounting tabs. The Upper Ring shall be all welded construction.

Finish: All components shall be coated with a custom formula of TGIC polyester powder in conformance with the specification outlined herein after fabrication.

CSC Bubble Climber

Bubble Climber: Shall be fabricated from 1 5/8" O.D. 14 gauge (.083") galvanized steel tubing, 1 5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. The Bubble Climber shall be all welded construction.

Archway w/ Socket: Shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with 3/16" hot rolled steel gussets. The Archway shall be all welded construction.

Finish: All components shall be coated with a custom formula of TGIC polyester powder in conformance with the specification outlined herein after fabrication.

CSC Chain Link Climber

Chain Link Climber: Shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with horizontal rungs fabricated from 1-1/16" O.D. x .075" (15 gauge) wall galvanized steel tubing. The attachment rail shall be fabricated



from 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing. The Chain Link Climber assembly shall be an all welded assembly.

Archway w/ Socket: Shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with 3/16" hot rolled steel gussets. The Archway shall be all welded construction.

Finish: All components shall be coated with a custom formula of TGIC polyester powder in conformance with the specification outlined herein after fabrication.

CSC Chain Net Climber w/ Rails

Chain Net Climber w/Rails: Shall be constructed from galvanized 7/32", 4/0 welded link chain and 1-1/16" O.D. x.075"(15 gauge) wall galvanized steel tubing. The net assembly shall be a one-piece welded assembly coated in conformance with the PVC specifications outlined herein. The net assembly shall attach to the frame assembly with 3/8" diameter S-Hooks with an ultimate tensile strength of 80,000 to 100,000 psi and meets the minimum 89 Rockwell 'B' scale. The side rails shall be formed from 2-3/8" O.D. x .095" (13 gauge) wall galvanized steel tubing and 3/16" x 2-1/2" hot rolled flat steel mounting tabs.

Archway: Shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing.

Finish: All components shall be coated with a custom formula of TGIC polyester powder in conformance with the specification outlined herein after fabrication.

CSC Clover Climber

Clover Climber: Shall be fabricated from 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing, and step rungs of 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing and 3/16" formed steel mounting tab. The Clover climber shall have a handhold of 1.029" x .083" (14 gauge) wall galvanized steel tubing. The Clover climber shall be a one-piece welded assembly.

Archway w/ Socket: Shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with 3/16" hot rolled steel gussets. The Archway shall be all welded construction.

Finish: All components shall be coated with a custom formula of TGIC polyester powder in conformance with the specification outlined herein after fabrication.

CSC Crazy Eight Climber

Crazy Eight Climber: Shall be fabricated from 1-5/8" O.D. x .083" (14 gauge) wall galvanized steel tubing, and step rungs of 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. The Crazy Eight climber shall have a handhold of 1.029" x .083" (14 gauge) wall galvanized steel tubing. The Crazy Eight climber shall be a one-piece welded assembly.

Archway w/ Socket: Shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing with 3/16" hot rolled steel gussets. The Archway shall be all welded construction.

Finish: All components shall be coated with a custom formula of TGIC polyester powder in conformance with the specification outlined herein after fabrication.

CSC Wavy Tree Climber

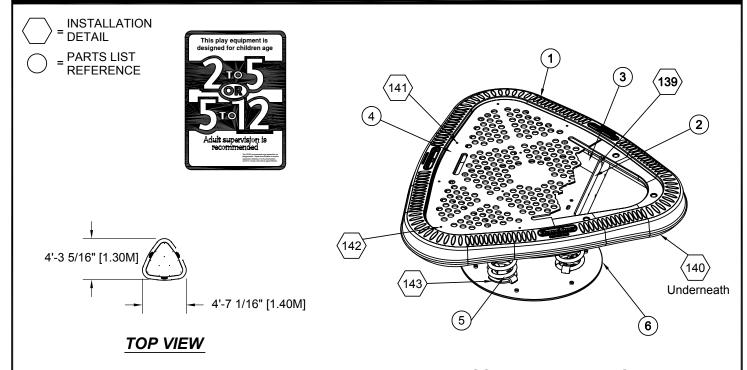
Wavy Tree Climber: Shall be a one-piece welded assembly with the center rail fabricated from 2-3/8" O.D. x .095" (13 gauge) wall galvanized steel tubing . The climbing rungs shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing. Mounting bracket shall be fabricated from 3/16" x 3-1/2" hot rolled flat steel.

Archway: Shall be fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing.

Finish: All components shall be coated with a custom formula of TGIC polyester powder in conformance with the specification outlined herein after fabrication.

6067 SPRING POD

ISSUED/REVISED: 01/14/05



ASSEMBLY DRAWING

SPECIFICATIONS

SPRING POD: The Spring pod is ADA accessible with transfer handholds fabricated into the coated infill piece. The Coated Infill is 11 gauge turret punched steel with an oven cured matte finish polyvinyl chloride (PVC) coating with a minimum coating thickness of .080". The PVC coating shall have a hardness of Shore A 83 +/-5 normal durometer range. This material is classed as "Self Extinguishing", meets or exceeds automotive specifications NVSS302, and contains ultraviolet inhibitors to help prolong the life of the coating. The Pod Base shall be rotational molded from polyethylene. The polyethylene shall be linear low-density material with UV-stabilized color and an anti-static compound additive. All rotational molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D-155); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD).

FRAME: Shall be an all welded assembly fabricated of 1.66" O.D. galvanized steel tubing with a wall thickness of .083" and 1.315" O.D. galvanized steel tubing with a wall thickness of .083". **SPRING:** Shall be fabricated of 3/4" diameter wire, 5-1/2" O.D. x 13-1/2" long. Spring is fabricated especially for Saddlemates. The spring shall have a powder coat finish.

MOUNTING PLATE: Shall be fabricated of 1/4" x 22" O.D. hot rolled flat steel. These plates shall have a powder coat black finish.

FORMED MOUNTING PLATE: Shall be fabricated of 1/4" hot rolled flat steel. These plates shall have a powder coat black finish.

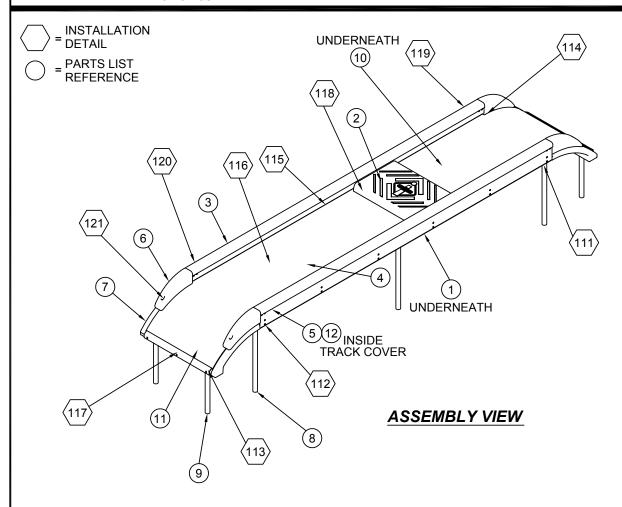
SPRING MOUNT CASTING: Shall be high strength type 32510 malleable iron.

HARDWARE: All nuts, bolts, screws, inserts, and lock washers used in the assembly of all play equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel. Fasteners with yellow dichromate treatment have an electro deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing.

NOTE: All weights are based on average comparisons of each part.

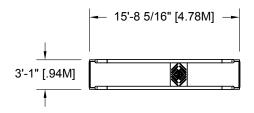
6120 GLIDE BOARD TRACK RIDE

ISSUED/REVISED: 02/02/05



*OWNER/OPERATOR SHALL INSTALL AND MAINTAIN PROTECTIVE SURFACING WITHIN THE USE ZONE (U.S.) OR PROTECTIVE SURFACING ZONE (CANADA) OF ALL PLAY EQUIPMENT TO COMPLY WITH ASTM F1292 AND ASTM F1487 (U.S.) OR CAN/CSA-Z614 (CANADA).

*THE ASTM USE ZONE AND CSA PROTECTIVE SURFACING ZONE ARE DETERMINED BY EXTENDING THE PRODUCT OUTSIDE DIMENSIONS SHOWN A MINIMUM ADDITIONAL DISTANCE OF 6'-0" [1.8M] IN ALL DIRECTIONS.



TOP VIEW

SPECIFICATIONS

HARDWARE: All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel. Fasteners With yellow dichromate treatment have an electro deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating.

Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing.

NOTE: All weights are based on average

NOTE: All weights are based on average comparisons of each part.

INSTALLATION INSTRUCTIONS

NOTE: THIS SPECIFICATION BOOKLET SHOULD BE KEPT IN CUSTOMER'S FILE FOR FUTURE REFERENCE.

NOTE: Do not overtighten bolts. To overtighten may cause buckling or dimpling of some parts.

NOTE: Read installation instructions thoroughly before starting assembly. Pour concrete only after final assembly is complete. Bracing material may be required during assembly.

NOTE: Do not tighten any nuts, bolts, rods, etc. until the unit is completely assembled.

STEP 1: Dig required ground hole as per Ground Plan.

STEP 2: Attach Floor Footbucks to Floor Weldment (6 Places) as shown in Detail 111.

STEP 3: Attach Track Cover to Floor Weldment (2 Places) as shown in Detail 112.

STEP 4: Place Floor Weldment into Proper Groundholes.

STEP 5: Attach Rotomold Footbuck to Rotomold End Ramp (2 Places) as shown in Detail 113.

STEP 6: Place Rotomold End Ramp into proper Ground Holes.

STEP 7: Attach Rotomold End Ramp to Floor Weldment (2 Places) as shown in Detail 114.

STEP 8: Attach Floor to Floor Weldment (2 Places) as shown in Detail 115.

STEP 9: Attach Rubber Floor to Floor and Rotomold End Ramp as shown in Detail 116.

STEP 10: Attach Rubber Clamp to Rotomold End Ramp, trapping ends of Rubber Floor as shown in Detail 117.

STEP 11: Place Glide Board in Track as shown in Detail 118.

Step 12: Insert rubber spring stop into track cover and attach metal stop to track cover (4 Places) as shown in Detail 119.

STEP 13: Attach Rubber End Cap to Track Cover (4 Places) as shown in Detail 120.

STEP 14: Attach Rubber End Cap to Rotomold End Ramp (4 Places) as shown in Detail 121.

STEP 15: Pour concrete to within 1'-0" [30.48 cm] of finished surface (see Detail 032). Allow concrete 48 hours (minimum) to cure.

NOTE: Loctite (supplied by others) should be used on all threaded hardware. Peen all tee-nuts to match radius of pipe after installation.







#8932 Tot Rock

WALLCANO PIECES: Shall be one piece construction parts manufactured from linear low-density polyethylene material and shall conform to the rotationally molded specifications outlined herein. Polyethylene shall be linear low-density material with UV-stabilized color and an anti-static compound additive. Rotationally molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D-1505); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD).

GRIPS: Shall be four organic variations injection molded of High Density Polyethylene.

METAL COMPONENTS: The Struts shall be fabricated from 1 7/8" O.D. x .120" (11 gauge) wall galvanized steel tubing. The Mounting Tabs shall be fabricated from 1/8" hot rolled steel. The Footbucks shall be all welded assemblies fabricated from 1-5/16" O.D. x .083" (14 gauge) wall galvanized steel tubing and 1/8" hot rolled flat steel. The Struts, Mounting Tabs, and Footbucks shall be coated with a custom formula of TGIC polyester powder coating in conformance with the specifications outlined herein, after fabrication.

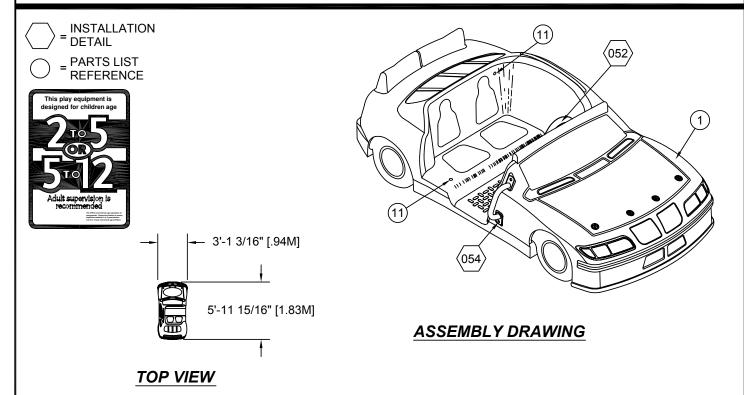
STEEL TUBING: All tubing used to manufacture components shall be an electrical resistance welded, cold rolled, high strength steel tubing. The exterior coating will consist of an in line hot-dipped uniform zinc galvanizing, chromate conversion, and acrylic over-coating. The interior coating will consist of a special organic acrylic modified polyester.

POWDER COAT FINISH: Shall be an electrostatically applied custom formula of TGIC polyester powder. All components will be free of sharp edges and excess weld spatter and shall be cleaned in a six stage bath system with an iron phosphate wash, as a rust inhibitor, and a sealer to prevent flash rusting before coating. The coating shall have a super tough finish with maximum exterior durability and will have superior adhesion characteristics. Typical characteristics are: 3.0 - 5.0 mil thickness and oven cured between 375 to 425 degrees Fahrenheit. Pencil Hardness H (ASTM D-3363), Impact (ASTM D-2794- 69), Wedge Bend (ASTM D-522-68),

HARDWARE: All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel. Fasteners with yellow dichromate treatment have an electro deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing.

8658 STOCK CAR

ISSUED/REVISED: 03/28/04



SPECIFICATIONS

STOCK: Shall be approximately 6'-0" [1.83M] long by 3'-0" [.94M] wide and shall accomodate two children. The Stock Car is ADA accessible with a transfer handhold fabricated from 1-1/16" O.D., 15 gauge (.075") wall galvanized steel tubing with 1-1/2" x 2-3/4", 11 gauge (.125") mounting tabs. The handhold shall be one-piece all welded and shall be coated with a custom formula TGIC polyester powder coating. The Stock Car steering wheel is formed of 8" diameter polyethylene. The Stock Car shall be rotational molded from polyethylene. The polyethylene shall be linear low-density material with UV-stabilized color and an anti-static compound additive. All rotational molded products shall meet or exceed the following specifications: ASTM D-1248, type 2, class A and Federal specification LP-390C, type 1, class M, grade 2, category 3; Density (ASTM D-155); Brittleness Temperature (ASTM D-746); Tensile Values (ASTM D-638); Flexural Modulus (ASTM D-790); Heat Distortion (ASTM-648); Low Temperature Impact (ARM-STD). All graphics are molded into part.

SPRING: Shall be fabricated of 3/4" diameter wire, 5-1/2" O.D. x 13-1/2" long. Spring is fabricated especially for Saddlemates. The spring shall have a powder coat finish.

BOTTOM MOUNTING PLATE: Shall be fabricated of

1/4" x 14" x 21-3/4" hot rolled flat steel. These plates shall have a powder coat black finish.

TOP MOUNTING PLATE: Shall be fabricated of 1/4" x 22" x 27-1/2" hot rolled flat steel. These plates shall have a powder coat black finish.

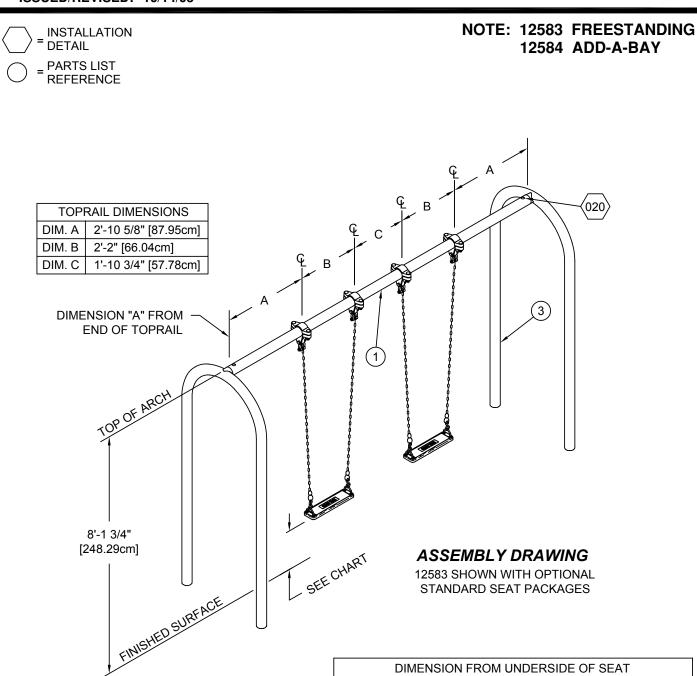
SPRING MOUNT CASTING: Shall be high strength type 32510 malleable iron.

HARDWARE: All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel. Fasteners with yellow dichromate treatment have an electro deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing.

NOTE: All weights are based on average comparisons of each part.

12583 ARCH SWING

ISSUED/REVISED: 10/14/03



NOTE: SWING SEAT PACKAGES SHOWN ON ASSEMBLY DRAWINGS NOT INCLUDED. SHOWN FOR ILLUSTRATION ONLY.

DIMENSION FROM UNDERSIDE OF SEAT TO PROTECTIVE SURFACING **STANDARD** MIN. MAX. *CANADIAN 1'-6" [45.72cm] 1'-2" [35.56cm] **ASTM** 1'-0" [30.48cm] N/A DIN 1'-3 3/4"[40.00cm] N/A **CPSC** N/A N/A

^{*} UNDER LOADED CONDITION BASED ON WEIGHT OF 165lb. [75kg.]

SPECIFICATIONS

TOPRAIL AND ARCH: Shall be fabricated of 3-1/2" O.D. (13 Gauge) galvanized steel tubing. Arch includes a welded 3-1/8" O.D. galvanized steel sleeve to which the toprail is fastened.

FINISH: Shall be an electrostatically applied custom formula of TGIC polyester powder with baked finish. Specify color desired.

HARDWARE: All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all play equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or

powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel. Fasteners with yellow dichromate treatment have an electro-deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing.



IMPORTANT PRODUCT INFORMATION STOP

☐ All equipment should be installed on a soft, resilient, energy-absorbing ground surface. NEVER INSTALL PLAY EQUIPMENT ON CONCRETE OR ASPHALT. A fall on a hard surface can result in serious injury to the equipment user. □ ALWAYS FOLLOW INSTALLATION INSTRUCTIONS WHEN ERECTING EQUIPMENT. □ Worn surfaces around equipment should be restored. Concrete footings should never be exposed. Surface depth should comply with installation instructions. ☐ Equipment should be placed to eliminate conflicting traffic patterns. □ All protruding nuts and bolts should be covered; sharp edges on pipes should be capped or removed. Check for bent, broken or severely worn pipe and replace. ☐ Test overall stability and rigidity of all play equipment. Check for proper assembly, installation and ground anchoring. ☐ Check for and repair damage caused by wear or vandalism, a major factor in injury-causing situations. ☐ THE MANUFACTURER PROVIDES ITS CUSTOMERS WITH COMPLETE INSTALLATION SHEETS AND INSTALLATION INSTRUCTIONS. THE INSTALLATION SHEET CONTAINS THE LISTING OF EVERY PART USED IN A PIECE OF EQUIPMENT AND SHOULD BE KEPT IN THE CUSTOMER'S FILES FOR ACCURATE REFERENCE WHEN REPLACEMENT PARTS ARE NEEDED. □ Never add components not intended for use with this product. □ Regular maintenance is necessary on this and all park and recreational equipment to ensure the safety of the user. ☐ Proper maintenance of equipment requires regular tightening of all bolts, nuts, and set screws. □ All equipment should be free of rust and repainted whenever necessary to deter rusting. □ Regular checking of all parts, castings, etc., should be made. If a part is broken or worn it should be replaced immediately. □ Replace all worn S-Hooks. S-Hooks must be completely closed. To close S-Hooks properly, use S-Hook Pliers. Failure to close S-Hooks properly can result in serious injury to the user. Never reuse S-Hooks. ☐ Test for free movement of swing hanger and other moving attached parts. ☐ Check for worn chains and replace them. ☐ Replace worn or damaged seats. ☐ A soft, resilient surface should be placed under all swings, extending at least six feet beyond the farthest arc of the swing seat,

both front and back. NEVER INSTALL PLAY EQUIPMENT ON CONCRETE OR ASPHALT.

8691 **SEAT**

ISSUED/REVISED: 09/14/04

INSTALLATION DETAIL

> PARTS LIST REFERENCE

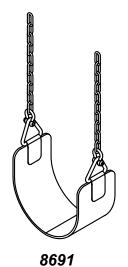


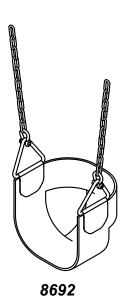
8695, CC8695, 8696, CC8696, 8914, CC8914



8908, CC8908, 8909, CC8909, 8910, CC8910, 8911, CC8911, 8918, CC8918, 8697, CC8697, 8698, CC8698, 8915, CC8915

BELT SEAT 8691 **BUCKET SEAT** 8692 **FULLY ENCLOSED SEAT** 8693 8695, 8696, 8697, 8698, 8908, 8909, 8910, 8911, 8914, 8915, 8918, CC8695, CC8696, CC8697, CC8698, CC8908, CC8909, CC8910, CC8911, CC8914, CC8915, CC8918 **SEAT PACKAGES**







SPECIFICATIONS

*Rights are reserved to disontinue or change specifications without notice.

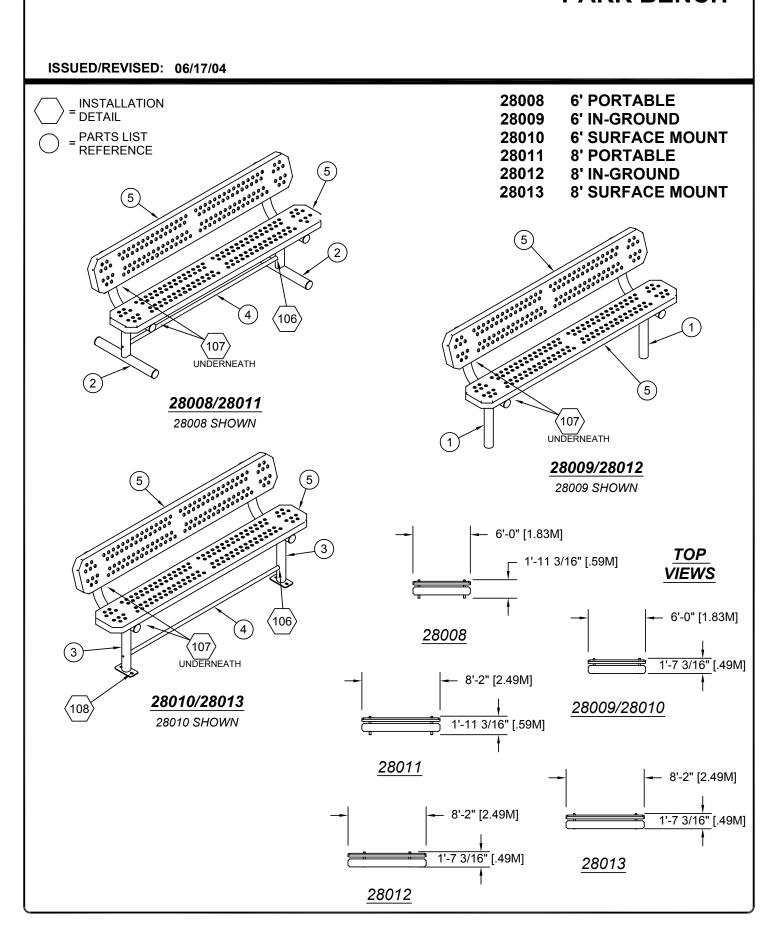
*Bucket Seats shall be fabricated with .020" thick stainless steel inserts covered by a dark green colored EPDM rubber.

*Fully Enclosed Seats shall be fabricated with .025" thick stainless steel inserts covered by a dark green colored EPDM rubber.

*Commercial Belt Seat - an extra piece of fluted rubber at the front and back of seat gives it a cushion bumper.

*NOTE: Weights are based on average comparisons of each part.

28008 PARK BENCH



SPECIFICATIONS

FRAME: The frames shall be fabricated of 2-3/8" O.D. galvanized pipe.

SEAT AND BACK: The seat shall be punched steel with a plastisol coating.

HARDWARE: All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel. Fasteners with yellow dichromate treatment have an electro deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing.



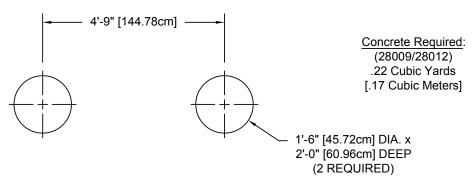
IMPORTANT PRODUCT INFORMATION AND SAFETY WARNINGS



□ ALWAYS FOLLOW INSTALLATION INSTRUCTIONS WHEN ERECTING EQUIPMENT.

☐ THE MANUFACTURER PROVIDES ITS CUSTOMERS WITH COMPLETE SPECIFICATION SHEETS & INSTALLATION INSTRUCTIONS. THE SPECIFICATION SHEET CONTAINS THE LISTING OF EVERY PART USED IN A PIECE OF EQUIPMENT AND SHOULD BE KEPT IN THE CUSTOMER'S FILES FOR ACCURATE REFERENCE WHEN REPLACEMENT PARTS ARE NEEDED.

- □ Regular maintenance is necessary on this and all park and recreational equipment to ensure the safety of the user.
- ☐ Proper maintenance of equipment requires regular tightening of all bolts, nuts, and set screws.
- □ Regular checking of all parts, castings, etc., should be made. If a part is broken or worn it should be replaced immediately.



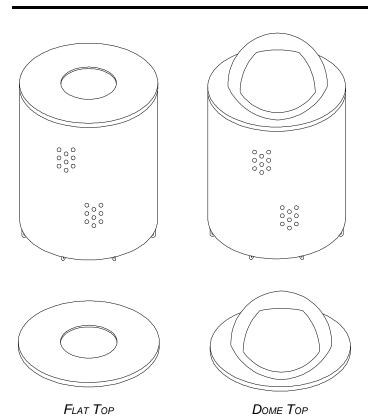
GROUND PLAN

28009/28012

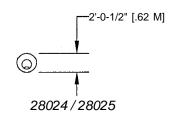
NOTE: Hole depths indicated on all ground plans are measurd from the finished surface. See Detail 109. All footing dimensions are based on level finished surface.

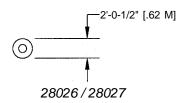
TuffClad

28023 LITTER RECEPTACLE



NOTE: 28023 RECEPTACLE
28024 IN-GROUND/DOME LID
28025 SURFACE MOUNT/DOME LID
28026 IN-GROUND/FLAT LID
28027 SURFACE MOUNT/FLAT LID





TOP VIEWS

SCALE: 1"=10'-0" [1:120]

SPECIFICATIONS

RECEPTACLE: Shall be fabricated from plastisol coated punched steel.

REFUSE CONTAINER: Shall be 32 gallon and be fabricated from chocolate colored plastic.

LIDS: Shall be fabricated from 16 gauge galvannealed steel.

FINISH: Lids shall have a powder coat black finish. HARDWARE: All nuts, bolts, screws, inserts, and lockwashers used in the assembly of all equipment, shall be stainless steel, yellow dichromate plated steel, blue-coat plated steel, mechanically galvanized or powder coated/yellow dichromate plated steel. All primary fasteners shall be 300 series stainless steel.

Fasteners with yellow dichromate treatment have an electro deposited, 99.9% pure zinc substrate applied from a specially formulated solution sealed with a yellow dichromate top coat designed to work in conjunction with the zinc plating. Yellow dichromate has a 320% longer life to white corrosion and 275% longer to red corrosion than does hot-dip galvanizing. Note: All weights are based on average comparisons of each part.